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and Art.*

"INTER SILVAS ACADEMI QUAERERE VERUM."

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CONTENTS OF VOL. III.

<i>General Literature.</i>		<i>GENERAL LITERATURE— continued.</i>		<i>GENERAL LITERATURE— continued.</i>		<i>ART AND ARCHAEOLOGY— continued.</i>	
<i>Reviews.</i>	<i>PAGE</i>		<i>PAGE</i>		<i>PAGE</i>		<i>PAGE</i>
Asbjörnsen's <i>Norwegian Popular Tales</i>	182	Sainte-Beuve's <i>Souvenirs et Indiscrétions</i>	181	Hauser, Kaspar, the wild boy	123	Schasler's <i>History of Aesthetic</i>	266
<i>Norwegian Huldré-Tales and Popular Legends</i>	182	<i>Nouveaux Lundis</i>	181	Heike monogatari (Japanese romance)	204	Stillman's <i>Photographs of the Acropolis at Athens</i>	264
Barsof's <i>Laments of the Northern District</i>	443	Schmidt's <i>Modern and Ancient Greece</i>	41	Henry IV., religious policy of	184	Story-Maskelyne's <i>Marlborough Gems</i>	147
Bartsch's <i>Deutsche Dichtungen des Mittelalters</i>	221	Schröder's <i>Saint Brandan</i>	202	Humboldt, Dr. Dove on	383		
Bergmann's <i>Fascination de Gulfi</i>	21	Simpson's <i>Correspondence and Conversations of Alexis de Tocqueville with Nassau William Senior</i>	303	Jardin des Plantes, fate of inmates of	26		
<i>Message de Skirnir</i>	21	Simrock's <i>Edda</i>	21	Keats' sonnet "To Sleep"	405		
Björnson's <i>Sigurd the Crusader</i>	462	Standish's <i>Souvenirs de la Marche de Beauvais</i>	324	Kosmos, MS. of Humboldt's	165		
Browning's <i>Prince Hohenstiel-Schwangau</i>	24	Strauss' <i>Voltaire</i>	301	L'Année terrible, Victor Hugo's	346		
<i>Fifine at the Fair</i>	243	Taine's <i>Notes sur l'Angleterre</i>	244	Legend of a miraculous spring	247		
Bruno's <i>Canti popolari delle Isole Eolie, &c.</i>	143	Tegnér's <i>Tale of Frithiof</i>	343	Lessing and his time	184		
Buchanan's <i>Drama of Things</i>	4	Tennyson's <i>Gareth and Lynette</i>	423	Le Théâtre reviewed	183		
Coleridge's <i>St. Francis Xavier</i>	202	Through the Looking-Glass, and what Alice saw there	23	Lever, Charles	226		
Desnoiresterres' <i>Voltaire</i>	301	Varnhagen von Ense's <i>Biographische Portraits</i>	164	Longevity, cases of supposed	64		
Domett's <i>Ranolf and Amohia</i>	362			Loretto, legend of holy house of	346		
Durand du Lau's <i>Érasme</i>	342			Makart, Hans, paintings by	26		
E. C.'s <i>Journal et Correspondance de André-Marie Ampère</i>	344			Maurice, Prof.	146		
Elze's <i>Lord Byron</i>	141			Max Müller (lecture of) at Strassburg	204		
Erckmann-Chatrian's <i>Story of the Plébiscite</i>	145			Mazzini on the aristocracy of France	106		
Erewhon; or, Over the Range	282			statue of	165		
Fausböll's <i>Ten Yttakas</i>	381			Mediocrity, French, in literature	383		
Fergusson's <i>Kude-Stone Monuments</i>	241			Metaphysical problems, the four	424		
Ferrazza's <i>Encyclopédie Dantescæ</i>	121			Metre, the laws of	204		
Frere, John Hookham, <i>Works of Hawthorne's Septimus</i>	101			Michel Angelo's sonnets	346		
Hawthorne's <i>Septimus</i>	404			Midsummer Night's Dream, Simrock's translation	87		
Helps' <i>Life and Labours of Mr. Brassey</i>	325			Muratori	363, 424		
Hoppe's <i>English-German Lexicon</i>	104			Netherlands, tour in the	227		
Hunfalvy's <i>Travels in Baltic Lands</i>	3			Niccolosi, G. B., his journey to Baden	123		
Ibsen's <i>Pretenders</i>	261			Nicolaus von der Flie	183		
Keil's <i>Briefwechsel von Katharina Elisabeth Goethe</i>	161			Niebuhr, unpublished letters of	165		
Lamartine's <i>Twenty-five Years of my Life</i>	261			Nogaret, Guillaume de	123		
Lassen's <i>Wergeland's Selected Works</i>	403			Occam, William of	264		
Lear's <i>More Nonsense</i>	23			Otrig Grange	123		
Leighton's <i>Works</i>	224			Ottlie, original of	466		
Lotze's <i>Gospel of a Poor Soul</i>	42			Page, Admiral, letters of	326		
MacCarthy's <i>Shelley's Early Life</i>	441			Paintings, sales of collections of	166		
Macdonald's <i>Princess and the Goblin</i>	23			Peter the Great	87		
Mazade's <i>Lamartine</i>	261			Pinot, the	445		
Mézière's <i>W. Goethe</i>	161			Poets, "new school" of	183		
Moltzer's <i>Bibliothek van Middelnederlandse Letterkunde</i>	201			Prezdecki, Count	124		
Moore's <i>Elegies of Propertius</i>	302			Proverbe from George Sand	87		
Morley's <i>Voltaire</i>	301			Punch, the, of Munich	44		
Morris' <i>Love is Enough</i>	461			Purgatory of St. Patrick, Breton mystery	26		
Newman's <i>Essays</i>	1			Revue des deux Mondes, index to	44		
Oliphan's <i>Court de Montalembert</i>	401			Rhyme, German	226		
Pavich's <i>History of the Ragusan Drama</i>	102			Royaume d'Yvetot	406		
Petri's <i>Hannam's Life and Works</i>	463			Schiller, unpublished letters of	146		
Petzoldt's <i>Bibliographie Dantea ab anno 1865 inchoata</i>	121			Signals with mirrors	183		
Pfeiffer's <i>Deutsche Classiker des Mittelalters</i>	221			"Six-fingered dynasty"	424		
Pfeifferer's <i>Dante's Divine Comedy</i>	163			Strauss, works of	64		
Pitré's <i>Canti popolari siciliani</i>	143			Terracottas by Michel Angelo	165		
Poems by V.	361			Trojan war, Middle-Dutch poem on	87		
Poems of Albert Möller	281			Twain, Mark	283		
Radloff's <i>Literature of the Turkish Races in Siberia and the Steppes</i>	421			Uhland, as a student of ancient German man	44		
Rae's <i>Taine's Notes on England</i>	244			Walpole's Letters	395		
Rambaud's <i>Testament d'un Latin</i>	121						
Renan's <i>Réforme intellectuelle et morale de la France</i>	61						
Rink's <i>Esquimaux Tales and Legends</i>	321						
Rogers' <i>Bacchae of Euripides</i>	145						
Rossetti's <i>Sing-Song</i>	23						

<i>Art and Archaeology.</i>	
<i>Reviews.</i>	
Andersen's <i>Fairy Tales</i>	184
Colvin's <i>Children in Italian and English Design</i>	267
Dafforne's <i>Pictures by Daniel Maclige; and Pictures by C. R. Leslie, R.A.</i>	224
Grimm's <i>Select Essays</i>	124
Gröpil's <i>Life of Raphael</i>	445
Ilg's <i>Dream of Poliphilus</i>	383
Konewka's <i>Illustrations to Faust</i>	184
<i>Falschaff und seine Gesellen</i>	184
Meyer's <i>Correggio</i>	81
Passavant's <i>Raphael of Urbino and Giovanni Santi</i>	6

Contents of Vol. III.

ART AND ARCHAEOLOGY— continued.	ART AND ARCHAEOLOGY— continued.	ART AND ARCHAEOLOGY— continued.	THEOLOGY—continued.
PAGE	PAGE	PAGE	PAGE
Drawings sold at Ghent 425	Lionardo da Vinci, statue to 408	Schleswig-Holsteiners, art-taste of 107	Müller's <i>Epistle of Barnabas</i> 206
Dresden print-room 284	List's Concerto at the Crystal Palace 46	Schlieck, Count 408	Palmer's <i>Desert of the Exodus</i> 428
Drummond, John, portrait of 328	Loggie of the Vatican 425	Schliemann, Dr. Heinrich 68	Reinke's <i>Explanation of the Old Testa-</i>
Dürer, Albrecht 108	Louvre, reopening of 7	Schöne, Richard 468	<i>tameni</i> 249
Dürer's "Vier Hexen" 108	———, new gallery 148	Sculpture, new gallery of, in the	Sanday's <i>Fourth Gospel</i> 364
Duron, M. Charles 327	———, fine-art collections in 327	Louvre 407	Tischendorf's <i>Novum Testamentum</i>
Düsseldorf, academy at 125	Maclean, Dr. Charles 148	Sepulchral monuments of England and	<i>Graece</i> 88
Ecole des Beaux-Arts 327	"Madonna with the Veil," the 68	Wales 347	Tregelles' <i>Greek New Testament</i> 88
Edinburgh, Duke of, art-collection of 44	Madrid museum, paintings in 309	Siege of Paris, exhibition of pictures	Tuch's <i>Commentar über die Genesis</i> 470
Eggers, Dr. Friedrich 363	Magnus, Prof. E. 327	representing 7	Vaughan's <i>St. Thomas of Aquin</i> 249
Engravings stolen from the Louvre 108	———, Dr. Dove on 387	South Slavonian ornaments 269	Weis' <i>Gospel of St. Mark</i> 285
Ephesus and its site 46	Mainz cathedral, restoration of 468	Springer, Dr. Anton 108	Wright's <i>Apocryphal Acts of the</i>
———, excavations at 69	Mancell's (M.) collection of works of	———, Prof. 363	<i>Apostles</i> 207
———, temple of Diana at 285	art 425	Stein, Baron von, statue of 268	Contents of the Journals.
Escorial, fire at 407	Mantegna, pen-and-ink sketch by 68	St. Mark's, Venice, projected restora-	Archiv für wiss. Erforschung der Alten
Etchings by Dutch painters 408	———, engravings by 308	tion of 108	Test., 12; British Quarterly, 50, 430;
Excavations in the temple of Castor 46	Marchese di Mirabella, portrait of 425	St. Ulrich's Church, Augsburg 387	Bullet. de l'Acad. d. Sci. de St.-Pétersb.,
——— at Ephesus 69	Mason, Mr. George 407	Tattersall's (Mr. J.) collection of pic-	190; Centralblatt, 12; Jahrb. f. deutsche
——— at Pompeii 107	Medallions of Louis XVI. and Marie	tures 269	Theologie, 12, 90, 288, 430; Jour. of Amer.
——— in Asia Minor 407	Antoinette 125	Temple of Castor, excavations in 46	Orient. Soc., 351; Jour. of Phil.,
——— in the Roman Forum 447	Melkshott Court, fire at 309	——— of Diana at Ephesus 85, 327	168; Jüdische Zeitschr., 288; Monatschr.
——— in the Catacombs 467	Merovingian burying-place, discovery	Theatres, Parisian 406	f. Gesch. u. Wiss. d. Judenthums, 12,
Exhibition, Duke of Edinburgh's 44	of 7	Thomassin, Philippe 109	90, 288, 472; Rev. archéol., 471; Rev.
——— of pictures by old masters 65, 82	Meyer, Dr. Julius 387	Tidey, Mr. Henry 284	critique, 430; Studien u. Kritiken, 288,
——— of pictures in water-	M. F. L., collection of 468	Tomb in the Terra di Lavoro 205	471; Theol. Literaturblatt, 50, 130,
colours 67	Michel Angelo's "David," site of 107	Tombs, new, discovered at Athens 45	211, 288, 430; Theol. Review, 168, 430;
——— of the Royal Academy 128, 184	Milan exhibition 327	Translators of German 268	Theol. Tijdschrift, 50, 130, 212, 368,
——— of Oesterreichische Mu-	Miniatures, Allégorie collection of 228	Trappes, Henry, suicide of 327	472; Trans. of Linn. Soc., 190; Zeitsch.
seum in Vienna 186	Montecassino, abbey of 87	Turner's later style 106	f. wiss. Theol., 50, 168, 368.
——— of the art-union of Basle 186	Monuments, destruction of, at Nürnberg 363	Ulund, statue of 68	Notes.
———, the Milan 363	Musée de Brussels, pictures in 45	"Uncatalogued Masterpiece," the 45	Acts of the Apostles, arrangement of 130
———, "black and white" 425	Museum, Berlin, antique casts in 425	Unger, W., etching by 284	Arnold, Matthew, on second part of
———, loan, in Berlin 447	——— for art and industry at Vienna 67	Usedom, Count von 363	Isaiah 211
———, retrospective, at Milan 468	Naples National 363	Vase, terracotta, found in the Seine 107	Burnouf's <i>La Science des Religions</i> 287
Eck, Jean van, notice on 126	Museums of Berlin 186	Venus, statue of 268	Colenso, Bishop, on the <i>New Bible</i>
Flameng, M. Léopold 228	——— of Paris 448	Vienna exhibition 308	Commentary 471
Fontainebleau, preservation of riches of 7	Napoleon, Prince, collections of 45	Villestreux, M. de, collections of 68	Crowfoot, Mr. 130
Forster, M. Francois 284	Necropolis, discovery of, at Bingen 45	Voltaire, bust of 109	Curtonian Syriac Fragments 430
Francis, Sir Philip, portrait of 46	Niederwald, national monument in the 468	Walmsley, Sir J., portrait gallery of 68	Diestel, Prof. of Jena 250
French Artists, exhibition of Society of 204	Nottingham Permanent Exhibition 148	Watts, Mr., R.A., paintings by 45, 108	Ecclesiastical history, Dr. Kraus on 130
Frere, Sir Bartle, statue of 45	Nürnberg, old, destruction of 284	Westmacott, Mr. R., R.A. 186	Ewald and Dorner, translations of 12
Fresco-painting, art and history of 229	Oldenburg, picture gallery at 107	Winckelmann, memorial to 284	Geiger, Dr. 130
Frieze of the Parthenon 283	Oratorio Concerts 86	Works of art, sales of 309	Ginsburg's expedition to Moab 430
Gautier, Théophile 447	Orleans, museum at 229	Gospel, the Fourth, authorship and	Gospel, the Fourth, authorship and
Gazette des Beaux-Arts 109	Ornamentation, Russian 228	character of 167, 187	character of 167, 187
German Musicians, General Society of 285	Paget, Sir James, portrait of 107	Gospels, Curtonian Syriac Fragments	Gospels, Curtonian Syriac Fragments
——— houses of parliament 327	Paintings, injury to, in German picture	of the 130	of the 130
Gilbert, Sir John 125	galleries 388	Grätz, Dr. 90	Grätz, Dr. 90
Gillot, M. F. 309	Palissy ware, discovery of 68	Hase, Dr. 90	Hase, Dr. 90
Gitter von Messing, the 348	———, fine piece of 284	Hausrath's <i>Neutestamentliche Zeit-</i>	Hausrath's <i>Neutestamentliche Zeit-</i>
Gladstone, Mr., new bust of 327	Paris Salon, the, 1872 227, 246	geschichte	geschichte
Glass-paintings of the Paris churches 68	Parthenon, ruins of cathedral at 7	——— 471	——— 471
Goethe memorial (Berlin) 327	Pature sale, the 108	Jewish colony in China 50	Jewish colony in China 50
Gothic architecture 109	Pereire collection of paintings 125	Keim, Dr. 130	Keim, Dr. 130
Greek art 424	Perrodin, M., paintings by 108	Kleinert, Dr. Paul, on Deuteronomy 350	Kleinert, Dr. Paul, on Deuteronomy 350
——— palace in Macedonia 203	Persigny collection, sale of 148	Kraus, Dr. F. X. 130	Kraus, Dr. F. X. 130
Grote, Mr., bust of 45	Pictures of foreign galleries, collection	Moshesh ben Shesheth's commentary	Moshesh ben Shesheth's commentary
Grüne Gewölbe, the 303	of copies of 7	on Jeremiah and Ezekiel 90	on Jeremiah and Ezekiel 90
Hainhofer 447	———, sale of collection of, in	Oehler, Prof. 90	Oehler, Prof. 90
Henry IV., bas-relief representing, at	Paris 45	Old Testament publications 90	Old Testament publications 90
Paris 45	Pottery, Chinese 229	Protestanten-Bibel <i>Neuen Testa-</i>	Protestanten-Bibel <i>Neuen Testa-</i>
Heuzey, M. Léon, on Greek costume 186	Printing, engravings relating to origin	mentes	mentes
Hodshon picture gallery 108	of 468	——— 471	——— 471
Holbein family, the 109	Prussia, neglect of art-interests in 68	Protestantism, the idea of 326	Protestantism, the idea of 326
Holbeiniana 228	Raphael, drawings in red chalk by 186	Prudentius, poems of 471	Prudentius, poems of 471
Holland, Lord, statue of 7	———, copies of cartoons of 206	Psalm cxxxvii. 5, Hebrew text of 211	Psalm cxxxvii. 5, Hebrew text of 211
Holzscherub, Hieronymus, portrait of 108	———, piece of sculpture by 408	obscenity of 250	obscenity of 250
Horeau, M. Hector 363	———, Madonna di Loreto by 327	Psalmists, discovery of 12, 50	Psalmists, discovery of 12, 50
Houses of parliament, German 228	———, marble group attributed to 447	Quarry, Dr., complaints by 50	Quarry, Dr., complaints by 50
Hunt, William, drawings of 68	Rathhaus of Munich, colossal figures	Strack's (Dr. H.) <i>Prolegomena</i> to the	Strack's (Dr. H.) <i>Prolegomena</i> to the
Ingres, monument to 107	for 68	Old Testament 471	Old Testament 471
———, crayon portrait of 125	Regnault, Henri 45, 108	Swedish commission on translation of	Swedish commission on translation of
Jamnitian cup, supposed 68	Reiter, Joseph 327	Bible 130	Bible 130
Julien, Bernard-Romain 7	Riocreux, M. 108, 125	Synoptic question, position of 285	Synoptic question, position of 285
Kaulbach's "Totentanz" 387	Robinson, Mr. J. C., etchings by 448	Tiele's <i>Egyptian and Mesopotamian</i>	Tiele's <i>Egyptian and Mesopotamian</i>
Kilmarnock, Earl of, portrait of 328	Rochefort, M., sale of works of art 186	Religions	Religions
Kirkup, Baron Seymour, sale of library	Roell, Mme., collection of paintings 205	——— 471	——— 471
of 8	Roman burying-place at Ratisbon 285	Wesley and Whitfield, works on 367	Wesley and Whitfield, works on 367
Knox, Mr. André, library of 328	Ronsard, statue of 284	Wetzstein on Biblical geography 350	Wetzstein on Biblical geography 350
Labarte, M. Jules 69	———, Rossetti 268		
Lady Chapel, the, of Exeter Cathedral 408	Royal Academy, exhibition of old		
Lamartine, statue to 7	masters at 8		
Landscapes and portraits 7	——— Archaeological Institute 308		
Lefuel, M. 205	Russia, industrial art in 308		
Liber Studiorum, Turner's 148	Salon, the, in Paris 69		
Lille museum 107, 148	——— "Sampson" of Michel Angelo 205		

Philosophy and Physical Science.
Reviews.
Auerbach's *Edition of Spinoza* 187
Balfour's *Palaeontological Botany* 368

Contents of Vol. III.

V

PHILOSOPHY AND PHYSICAL SCIENCE—continued.		PHILOSOPHY AND PHYSICAL SCIENCE—continued.		PHILOSOPHY AND PHYSICAL SCIENCE—continued.		PHILOSOPHY AND PHYSICAL SCIENCE—continued.	
	PAGE		PAGE		PAGE		PAGE
Barrande's <i>Tribolites</i>	51	Animal cellulose	95	Dog, prehistoric remains of	434	Ilsenmannite	15
Barzellotti's <i>La Morale nella Filosofia positiva</i>	250	— heat	389	Dogs, domestic, in Brazil	112	Infra-Lias in Yorkshire	94
Bastian's <i>Ethnological Collections</i>	353	Animaculae, prevention of generation of	95	Dredge, the first	315	Inosit in the vegetable world	96
— <i>The Beginnings of Life</i>	408	Animals, immigration of, to Mauritius, &c.	151	Drosera, leaves of	253	Insects, marine, inland locality for	29
Butler's <i>Lepidoptera Exotica</i>	168	Aquarium at Berlin	212	Dulcitanine	475	—, centre of gravity in	95
— <i>Cistula Entomologica</i>	168	Arabia, Southern	189	Dyslyte, eulyte and	135	—, colours of	315
Cobbe's <i>Darwinismus in Morals, &c.</i>	230	Arachnide, new, from Lancashire	356	Earthlight on the moon	316	Iodine vapour	475
Fraser's Works of George Berkeley	27	Arctic exploration	71, 150	Eclipse expedition, the	51	Iron, metallurgy of	55
Grisebach's <i>Geographical Botany</i>	213	— regions	111, 389	Electricity, generation of, by water	355	Irons, meteoric, of Greenland	54
Grote's <i>Aristotle</i>	431	Argentine Republic, geology of	315	Elephant remains in Colorado	214	Isuretin	172
Hanstein's <i>Morphology and Physiology of Plants</i>	388	Arthropoda, embryology of	28, 112	Embryology of Arthropoda	28	Italy, primitive inhabitants of	413
Hartmann's <i>Philosophy of the Unconscious</i>	90	Ascidian, early stages of	189	<i>Encyclopedie chimica</i>	332	Jemland, rocks of	314
Hech's <i>Introduction of Cultivated Plants and Domestic Animals into Europe</i>	309	Asia, Central	189	Endogenous cell formation	450	Jurassic period, zoological provinces of	133
Hewitson's <i>Exotic Butterflies</i>	168	Atmospheres of the fixed stars	316	Engis caves, the	331	King-crab, affinities of	73
— <i>Equatorial Lepidoptera</i>	168	Atolls or lagoon islands	255	Epilepsy artificially produced	170	King-crabs and Trilobites	30
Hofmann's <i>Organic Chemistry and Material Medica</i>	269	Aurora, spectroscopic examination of	113	Etruscan antiquities in Belgium	330	Kitchen-middens of Denmark	474
Jellett's <i>Theory of Friction</i>	448	Aurorae, altitudes of	316	Eulyte and dyslyte	135	Kongsbergite	475
Jevon's <i>Political Economy</i>	130	Balaenoids of the Vienna basin	450	Eureka (Nevada), geology of	252	Laboratory, new, at Rome	332
Jodl's <i>David Hume</i>	388	Bird, fossil, in Kansas	133	Europe, topography of	291	Lacaze-Duthiers, Prof. H. de	112
Kirby's <i>Diurnal Lepidoptera</i>	168	— prey, discovery of extinct	133	Excavations at Mzchet	331	Lake Ladoga, western shores of	54
Klebsch, Alfred	440	Birds of paradise, caudal plumes of	112	Explosions in flour-mills	356	Layard, Mr. E. L.	30
Mahaffy's <i>Kant's Critical Philosophy</i>	351	— of New Zealand	190, 434	Eye, development of lens of	215	Leaves of Ampelopsis	172
Phillips' <i>Geology of Oxford and Valley of the Thames</i>	212	—, cretaceous, of N. America	214	Ferrals, wood in the (letter to Editor)	412		
Preyer's <i>Blood Crystals</i>	23	—, sense of sight in	273	Lithium in vegetable structures	372		
Reinwarth's <i>Rock Salt Deposits of Staßfurt</i>	569	—, British, handbook of	391	Lizards of Germany	112		
Schellen's <i>Spectrum Analysis</i>	288	Blood, variation of gases in the	215	Loess in S. Africa	54		
Seec'h's <i>Le Soleil</i>	288	—, inorganic constituents of	272	— in China	214		
Smith's <i>Air and Rain</i>	354	—, gases of the	330	Lymphatics of mucous membranes	371		
Spicker's <i>Philosophy of Shaftesbury</i>	313	Blood-showers	30	Mammoth cave, fauna of	112		
Staudinger and Wocke's <i>Catalog der Lepidopteren des Europäischen Faunengebiets</i>	168	Bone-cave in Namur	414	Magnesia, separation of, from the alkalies	16		
Stricker's <i>Handbook of Histology</i>	109	Bones, long, growth of	234	Manganese in vegetable tissues	475		
Taylor's <i>Primitive Culture</i>	69	Borealis, T. Coronae	113	— chloride, colour of	172		
Van der Wijck's <i>Psychology</i>	472	Bornite	54	Mangischlak peninsula	252		
Von Siebold's <i>Parthenogenesis of the Arthropoda</i>	149	Botany, systematic	451	Mechanism of thought	94		
Zimmermann's <i>Samuel Clarke's Life and Doctrine</i>	130	Boulder clay section in Cheshire	252	Medical education of women	414		
Contents of the Journals.							
Archives néerland. des Sci. exactes et nat., 112; Bulletin de la Soc. imp. des Naturalistes de Moscou, 112, 272; Journal de Sciences math., phys. e nat. da Acad. R. das Sc. de Lisboa, 112; 112; Mém. de la Soc. des Sci. nat. de Cherbourg, 112; Trans. and Proc. of N. Zealand Instit., 413.		Brachiopoda, habitat of	171	Mercury, vaporisation of	74		
Notes.							
Absorption-spectra of gases and vapours	173	Brackish forms in marine deposits	94	Metalloids, reciprocal substitution of	95		
Acar, muscular tissue in	170	Bronze age, the	413	Metals, colour of	355		
Acid, carbonic, decomposition of	357	Bytownite	172	Metamorphosis of tissue	450		
—, phosphotungstic	475	Cabbage butterfly in the United States	435	Meteoritic iron of Greenland	233		
Aérolites, fall of, in France	332	Caesium, distribution of	235	— shower	316		
Africa, West	72	Caffein	291	Meteorite, the, of Ibbenbüren	271		
—, South	112	Calamostomus	112	Meteoroites of the Mexican desert	16		
—, Central	328	Cane sugar, conversion of, into grape sugar	172	Micrococcus in measles and scarlet fever	29		
Air, compressed, effects of	390	Capillaries, tension of gases of blood	14	Mill, Mr. J. S.	291		
Ak-tau and Kara-tau Mountains	54	Capsules, elastic force of	357	Mimicry in plants	30		
Albuminates, absorption of, in the large intestine	24	Caravan route from Wadai to Egypt	291	Mineralogical notices	433		
Albuminoids, conversion of, into urea	172	Carbon, specific heat of	173	Miocene of North Germany	450		
Alcohol, absolute, preparation of	16	Celt, bronze, analysis of a	331	Moa remains in New Zealand	391		
— as a food	215	Ceratodus	30, 272	Mohl, Prof. Hugo von	152		
—, normal hexyllic	475	Cetotherium remains in Southern Russia	15	Molluscs (land) in the Sandwich Islands	316		
Aldol	271, 433	Chalk formation, divisions of	357	Mongolia, Western	329		
Aleutian Islands	252	Chemical reaction, influence of time on	372	Morocco	329		
Algae, marine, of St. Helena	253	Chicago Academy of Sciences	73	Muschelkalk of the eastern Alps	252		
Alizarine, artificial	55	Chimpanzee, muscles and nerves of	53	Muscle plasma, contractility of	53		
Alpine formations in Transylvania	94	Chinamine, a new alkaloid	233	—, striated	330		
Amblygonite	233	Chloride, silver, solubility of	234	Muscles, voluntary, tone of	14		
Ameland	189	Clay deposits near Campbeltown	315	Naturforscherversammlung, Deutsche	135		
Ammonium carbamate, dissociation of	15	Coagulation, process of	451	Nerve traversed by electricity	450		
Andes, movement of depression of	232	Coal in the Trap of Glenaruck	54	Nerves, histology of the	170		
Aniline, conversion of, into toluidine	332	Coal-measures of Carinthia	215	—, effects of extension of	215		

Contents of Vol. III.

PHILOSOPHY AND PHYSICAL SCIENCE—continued.		PHILOSOPHY AND PHYSICAL SCIENCE—continued.		HISTORY—continued.		HISTORY—continued.	
	PAGE		PAGE		PAGE		PAGE
Parasitic plant, new	152	Sulphides, metallic, decomposition of	96	Hook's <i>Lives of the Archbishops of Canterbury</i>	254	Olimpia Maldachini	337
Parthenogenesis, observations on	29	Sulphocarbamic acid, derivates of	372	Kirke's <i>First English Conquest of Canada</i>	76	Parthey, Dr. Gustav	195
Part-dust and blood-showers	30	Sun, rotation of the	173	Long's <i>Decline of the Roman Republic</i>	153	Phoenicia and Israel, essay on	34
Patagonia, glaciation of	314	Switzerland, Vertebrates of	233	Luard's <i>Matthaei Parisiensis Chronica Majora</i>	106	Rolls Series, recent editions in	415
Peat, the, of Austria	54	Syngenie	391	Markham's <i>Discovery of Peru</i>	394	Scheffer-Boichorst, Dr. Paul	196
Pepsin, action of, on blood fibrin	215	Syphilis, detection of	254	Royal Commentaries of the <i>Yncas</i>	456	Sprenger's <i>Arabia</i>	258
Perception, philosophy of	231	<i>Syrraptes paradoxus</i>	315	Luard's <i>Matthaei Parisiensis Chronica Majora</i>	106	Springer's <i>Life of Dahlmann</i>	477
Pflüger's <i>Archiv</i>	14	Tanganyika, Lake	231	State Papers relating to Ireland	415		
Phosphates of lime, native	96	Tapir, hairy	111	Stein, Baron, statue of	296		
Phosphorescence	134	Tartar emetic in producing vomiting	390	Stockmar, Baron, memoir of	296		
Phosphorus perchloride	135	Tartaric acid, conversion of, into racemic acid	332	Strassburg University	195, 416		
Photography, application of, to illustrations of natural history	29	Taste, nerves of	170	Ulmann's <i>Frans von Sickingen</i>	478		
Physostigmia and atropia	253	Tertiary basin of Lower Rhine	450	Walter of Coventry's historical collections	415		
Picus leuconotus	390	Thanatophidia, the, of India	434				
Planets, new	173	Tin ore in Australia	449				
Plant remains in Permian beds of Bohemia	214	Tissue, metamorphosis of	14				
Plants, absorption of water by leaves of	292	Toluidine, conversion of aniline into	331				
—, arrangements of leaves	152	Torpedo, electric discharge of	53				
—, mimicry in	30	Tortoises, Terrapins, and Turtles	390				
—, modifications in habits of	292	Trachyte-porphry of Antrim	357				
—, silicium of	357	Trendelenburg, Prof.	53				
Pliocene of Tuscany	450	Trias of the South Bakonyer Wald	412				
Poison of animals, use of	72	Trilobite, giant	171				
Primordial group of Canada	357	Trilobites	30				
Prussian people, origin of	414	TROUT, development of ova of	291				
Pteraspis	412	Tridymite	474				
Purbeck beds of Southern France	171	Turkey, domestic, origin of	78				
Pyrology	475	United States geographical surveys	232				
Quaternary of Sullivan Co.	215	Upheaval of the Swedish coast	94				
— in neighbourhood of Dresden	449	Upper Greensand of Cambridge	94, 449				
Queensland, geology of	215	Urea of the animal body	331				
Quinine, action of, on the blood	371	Uric acid, its relation to muscular action	170				
Racemic acid, conversion of tartaric acid into	332	Urine, influence of food on	434				
Rain, red or blood-coloured	135	URN, primitive	93				
Rattlesnake, new theory of	152	Uterus, movements of	254				
Respiration, influence of, on circulation	254	VAGUS, the	170				
Rhinoceros, Sumatran	390	<i>Vanessa antiopa</i>	390				
Rhytina, skin of	152	Vaso-motor nervous system	53				
River courses of England and Wales	133	Vesuvius, eruption of, effects of, on vegetation	253				
Rocks, metamorphic, of the Western Alps	54	Violet light, influence of, on growth of animals and plants	95				
Rubidium in plants	372	Vision, recurrent	371				
Saline solutions, density and capillary action in	73	VIS VIVA, conversion of, into heat	356				
Scandinavia, geology of mountains of	315	VITOS, Mount, region of	111				
Schlesische Gesellschaft für vaterländische Cultur	30	Wara, chief town of Wadai	189				
Schweinfurt, Dr.	72	Watts, Dr., on spectra of elementary bodies	113				
Sculptured rocks in Ohio	94	Wax of plants	253				
Seebachite	433	Wealden formation, origin of the	171				
Seeds, dispersion of, by the wind	30	Wellingtonias, genealogy of	391				
Sellaite	233	Wings, physiology of	95				
Serous membranes, anatomy of	95	Xanthophyllite, diamonds found in	15				
Shells, marine, of the desert of Kara-Kum	54	Yarkand, sand-pits, mud-volcanoes, and brine-pits of	314				
Siberia, Eastern, elevation of	389	Yellowstone Park, America	151, 189				
Sicily, rock salt and sulphur deposits of	171	Yucca, fertilisation of	391				
Silicopropionic acid	55	Zimbae, ruins of	151				
Silurian, Lower, in Thuringia	412	Zoological Society of London	232				
Snakes, collection of, in British Museum	30	Zoology, history of	434				
Solar discoveries, Father Secchi on, 370, 451							
South Pole, exploration of	329						
Spectra, measurements of	113						
Spectroscope, Donati's	355						
Spectrum, ultra-violet rays of the	355						
Sphincter vesicae, the	390						
Spiders, Madeiran	390						
Spleen, anatomy of the	330						
Sponges, new	315						
Spongilla, structure of American	134						
Squalorula polyspondyla	215						
Starch, transformation of products of	216						
Stimpson, Dr. William	273						
Stone implements found in Greece	93						
Strychnia, new base derived from	55						
—, action of, on vaso-motor system	450						
Surgeons, development of	111						

PHILOLOGY—continued.		PHILOLOGY—continued.		PHILOLOGY—continued.		
	PAGE		PAGE		PAGE	
Schrader's <i>Decipherment of the Assyrian Inscriptions</i>	437	Soc., 205, 440; Jüdische Zeitsch., 440, 460; Λαοδάρα, 199; Lit. Centralblatt, 20, 80, 280; Magyar Nyelvör, 220; Mittheilungen, 199; Monatsschrift f. Gesch. u. Wiss. des Judenthums, 280; Pandit, 59, 220, 260, 320; Philol. Anzeiger, 60, 260, 380; Philologus, 260; Phoenix, 240, 420; Rev. celt., 480; Rev. crit., 60, 80, 140; Rhein. Mus., 60, 220, 320; Tijdschrift voor Indische Taal-, Land- en Volkenkunde, 59; Zeitsch. der deutsch. morgenländ. Gesellschaft, 59, 140, 400; Zeitschr. f. die österr. Gymnasien, 20, 60, 260; Zeitsch. f. deutsch. Alterthum, 320; Zeitsch. f. deutsch. Phil., 480; Zeitsch. f. vergl. Sprachf., 380; Zeitsch. f. Völkerpsych. u. Sprachwissenschaft., 400.		Diels' <i>De Galeni Historia Philosophica</i> 360 Eberhard's <i>Fabular Romanenses</i> .. 438 <i>Edda</i> , the		Moabite Stone, the
Shilleto's <i>Thucydidis I.</i>	236	'Ἐπιγύαλον, in Soph. <i>Oed. Col.</i> 149x .. 58	Nibelungenlied, the			
Thorbecke's <i>Al-Hariri's Durrat-alghawws</i>	216	Female students in universities	Nöldeke, Prof. Theodor			
Tyrrell's <i>Bacchae of Euripides</i>	137	Finzi, Sig. Felice	Ollanta, Markham's translation of (letter to Editor)			
Volkmann's <i>Greek and Roman Rhetoric</i>	396	Freund's <i>Study of Philology</i>	Panegyrici latini			
Wagner's <i>T. Macci Plauti Trinummus</i> 298		Gaisford's <i>Scriptores Latini</i>	Philological periodical, new			
Wedgwood's <i>Dictionary of English Etymology</i>	218	Goldstucker's (Prof.) Papers	<i>Pratiyindastram</i> , Weber's			
Wiesner's <i>New Date for the Jerusalem Talmud</i>	117	Greek colony at Venice	Prose texts, Anglo-Saxon			
		— poem, mediaeval	Quicherat's <i>Nonius</i>			
		Grein, Dr.	Rhetoric, Greek and Roman			
		Harris papyrus, the	"Sage"			
		High German dialect of East Russia ..	Sanskrit chair in Madras College			
		Koch, Dr. C. Fr.	— College, Calcutta			
		Koraës, Adamantios, remains of	— MSS., catalogue of			
		Latin, pronunciation of	Sathas' <i>Μεταωρική Βιβλιοθήκη</i>			
		Legrand, M. Émile, collection of Greek compositions	Shapira, M. (letter to Editor)			
		Levy, Dr. M. A.	Sriharsha, Sanskrit author			
		"Bark," derivation of	Stamaty's letters on the French Revolution			
		Bell's "Visible Speech" alphabet	Syed Ahmed Khan on Wahabism			
		Brockhaus, Dr.	Tanjore, researches in			
		Chess, Indian game of	Terence, English MSS. of			
		Congrès scientifique de France	Trumpp, Dr.			
		Congress, Philological, at Leipzig	University organization			
		Conington's <i>Persius</i> (letter to Editor) 419	Vocabulary, Arabic, ancient			
			Voss, biography of			
			Wahabism			

Contents of the Journals.

Archaeol. Cambr., 480; Bijdragen tot de Taal- en Volkenkunde v. Nederl.-Indië, 59, 300; Calcutta Rev., 200; Gött. gel. Anz., 187, 280, 400; Grätz's Monatschr., 420; Hermes, 140, 300, 420; Indian Antiq., 80, 200, 240, 300, 399; Journ. Amer. Orient. Soc., 400; Journ. asiat., 20, 59, 100, 140, 187, 320, 380, 420, 480; Journ. of Bombay Branch Roy. As. Soc., 220; Journ. of Camb. Archaeol. Assoc., 380; Journ. of Philol., 80; Journ. of Roy. As.	PAGE
---	------

Notes.

"Asclepius," dialogue entitled	20
Assyria and Babylonia, language of	19
Assyrian discoveries (letter to Editor) 360	
Baehrens, Dr. E.	120
"Bark," derivation of	19
Bell's "Visible Speech" alphabet	199
Brockhaus, Dr.	440
Chess, Indian game of	220
Congrès scientifique de France	260
Congress, Philological, at Leipzig	238
Conington's <i>Persius</i> (letter to Editor) 419	

		PHILOLOGY—continued.	PAGE
		Diels' <i>De Galeni Historia Philosophica</i> 360	Moabite Stone, the
		Eberhard's <i>Fabular Romanenses</i> .. 438	Müller's <i>Quaestiones Criticae de Galeni Libris</i>
		<i>Edda</i> , the	Nibelungenlied, the
		'Ἐπιγύαλον, in Soph. <i>Oed. Col.</i> 149x .. 58	Nöldeke, Prof. Theodor
		Female students in universities	Ollanta, Markham's translation of (letter to Editor)
		Finzi, Sig. Felice	Panegyrici latini
		Freund's <i>Study of Philology</i>	Philological periodical, new
		Gaisford's <i>Scriptores Latini</i>	<i>Pratiyindastram</i> , Weber's
		Goldstucker's (Prof.) Papers	Prose texts, Anglo-Saxon
		Greek colony at Venice	Quicherat's <i>Nonius</i>
		— poem, mediaeval	Rhetoric, Greek and Roman
		Grein, Dr.	"Sage"
		Harris papyrus, the	Sanskrit chair in Madras College
		High German dialect of East Russia ..	— College, Calcutta
		Koch, Dr. C. Fr.	— MSS., catalogue of
		Koraës, Adamantios, remains of	Sathas' <i>Μεταωρική Βιβλιοθήκη</i>
		Latin, pronunciation of	Shapira, M. (letter to Editor)
		Legrand, M. Émile, collection of Greek compositions	Sriharsha, Sanskrit author
		Levy, Dr. M. A.	Stamaty's letters on the French Revolution
		"Bark," derivation of	Syed Ahmed Khan on Wahabism
		Bell's "Visible Speech" alphabet	Tanjore, researches in
		Brockhaus, Dr.	Terence, English MSS. of
		Chess, Indian game of	Trumpp, Dr.
		Congrès scientifique de France	University organization
		Congress, Philological, at Leipzig	Vocabulary, Arabic, ancient
		Conington's <i>Persius</i> (letter to Editor) 419	Voss, biography of
			Wahabism

THE ACADEMY.

"INTER SILVAS ACADEMI QUARRERE VERUM."

VOL III.—NO. 39.

Readers are reminded that the mention of New Books, Articles, &c., in our lists is intended as a guarantee of their importance. The Editor of THE ACADEMY cannot undertake to return communications which are not asked for.

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General Literature.

Newman's Essays, Critical and Historical. Pickering, 1871.

It is fortunate that the distinguished author has been induced to give these essays in an accessible form to the world at a time when they may still be useful in enabling contemporaries to understand him as far as it is possible to understand such an enigmatical figure at all. At present there is a tendency to regard him as a sort of second Pascal, a sincere and passionate sophist or a dialectician inspired by despairing love according as the individual reader happens to agree with his conclusions or to disagree. Without entering into a premature discussion of the relative rank of the two thinkers, it may be well to point out the more obvious traits that separate him both from Pascal and from another writer to whom he owes more if he do not resemble him more—we mean from Bishop Butler. Both Pascal and Butler stand of course in living relation to their age, but the argument of both is independent of their historical position. Dr. Newman will soon require as long an historical commentary as any Anglican divine of the seventeenth century. Again, though he shares with Pascal the irresistible tendency to extreme alternatives, he is as far as possible from Pascal's eager, impatient, diseased impetuosity; his mind moves cautiously and slowly, with perfect self-possession under all kinds of self-imposed moral and intellectual restraints. Then Pascal delights to throw everything into lurid picturesque antitheses. Dr. Newman prefers sober massive adumbrations of truth; he is only a dogmatist because he is penetrated with the importance of viewing religion as something thoroughly objective, as dealing with an order of definite spiritual facts, which exist in and for themselves before they exist for us. But this kind of dogmatism is not incompatible with such an abiding recognition of the inadequacy of language and thought as inclines him to resent the necessity of attempting precision at all, and to speak more than once as if the definitions extorted from the Church were one of the worst effects of heresy. Pascal and Butler are essentially sceptics: Butler seems to have no intellectual interests beyond the narrow circle of moral and spiritual probabilities to which he labours to bring every thought into captivity; Pascal uses his mastery of one form of positive knowledge to disparage that and all the rest. Newman, on the contrary, has a sincere respect for history and literature because he understands them; even his tendency to apply transcendental

VOL III.—NO. 39.

solvents to the results of physical science is increasingly justified by the spontaneous progress of science, and of itself would hardly amount to scepticism. Perhaps it is this comprehensive justice rather than the undeniable difference of circumstances which accounts for the difference between him and his predecessors in their treatment of opponents. Pascal avowedly treats the world as a world of madmen who will think him mad; Butler does not affect to disguise his contempt for the frivolity of the persons of freethinkers any more than his concern at the gravity of their arguments. Newman, on the contrary, has no instinctive contempt for a thorough-going adversary at all; he feels that he is confronted by a complete, substantial, intelligible view with plenty to say for itself, by a view which he can enter into, nay, which he might easily share but for considerations which he feels in the last analysis are personal, though he necessarily believes that they are also normal. Or, to put the same thing in another way, Newman is tolerant of the worldly man's philosophy of the world, because to him the world is a good and beautiful thing in itself, although it was never the best thing and is now shamefully marred; Pascal, like Bossuet, can only see *le vide et le néant au fond des choses*; Butler can only see a theatre for moral action; Pascal is a Christian Nihilist, Butler is a Christian Stoic, Newman is a Christian Platonist.

Of course the characteristics of such a many-sided writer manifest themselves in different degrees in different works; in the present volumes the reader is struck principally by the thorough, not to say cruel, mortifications under which the writer's intellect has maintained its vigour, and by the way in which that intellect is, so to speak, encrusted with all kinds of historical accidents. For this last reason we are glad that the essays were republished while they are still intelligible: Dr. Newman is probably mistaken in thinking that there is any danger of their being reprinted "to serve the cause for which they were written;" at least it is hardly possible to imagine an Anglicanism of the future which anything like an honest reprint could serve; but it is also certain that a more disinterested curiosity would sooner or later insist on a complete edition of his work, and we have to thank him for meeting a demand which his modesty does not permit him to anticipate.

Writers who devote themselves to ecclesiastical subjects make many sacrifices, and not the least is that they subject themselves to the necessity of being useful: they have to refute everybody who for the moment is dangerous; they have to esteem all unobjectionable people who are doing good service; they have to answer every question which occupies the public, if possible in the very terms in which the public states it. For instance, in the admirable essay on Private Judgment, Dr. Newman has really given the *coup de grâce* to that interesting fetish, by showing that the majority of mankind never dream of exercising anything that can be called by the name, even when they set themselves seriously to choose or change a religion, and that if they attempted to exercise it the attempt would only bring out their utter incapacity. The work has been done, and it has not needed to be done again: those who maintain that assent ought upon the whole to follow the balance of producible evidence have been permanently driven back upon the uncomfortable and demoralising doctrine that the majority of mankind ought definitely to recognise their utter incompetence for rational assured belief, and make up their minds to get on as well as they can with feelings and practices, opinions and interests. If this had been all, it might have been ungracious to regret that the writer had done no more. But such rough iconoclasm was too unedifying to be really effectual, it was necessary to find pre-

cedents and promises in Scripture for the exercise of something that might be called private judgment in the sense of being individual, and to argue in the very spirit of Puritanism that whatever these did not cover was *ipso facto* illegitimate : while the whole is crowned by developing Butler's paradox that the contents of a revelation can never be criticised into the solemn conclusion that the only proper subject for private judgment is to be found in the two questions, What is the Church, and where is it? Of course, when the essay was written these things were more important than any historical enquiry into the origin of the enormous influence of the phrase and of the circumstances when it was least unmeaning, but the importance of such things does not last so long. There are too many illustrations of the same misfortune in the two volumes. No writer of Dr. Newman's eminence, except an ecclesiastical writer, would have condescended* to take a man like Mr. Abbott seriously, only an ecclesiastical writer could have recommended a book so full of tedious shallowness, of ingenious dulness, as Palmer on the Church, without being blind to the defects which make the work an abomination to the natural man. But there are other peculiarities of the writer's position which illustrate ecclesiastical history on a side which is not repulsive. In these essays Anglicanism presents itself probably for the last time as a genuine product of the Church of England : not as a sort of dialectical necessity as the only hypothesis which meets the intellectual, historical, and moral conditions under which Englishmen can permanently maintain a religion, but as the sum of duties incumbent upon the Church of England man as such, hardly more disputable than tithe-paying or church-going, though some of them might be less obvious. Of course this involved a hearty acceptance of the positive side of the Protestant tradition, which had been renewed by the unexhausted influence of Methodism within and without the Establishment. Accordingly, in the very remarkable review of Milman's *History of Christianity* we find the doctrine of the Forgiveness of Sins put forward as the distinguishing essential feature of the Gospel dispensation. No doubt, as Dr. Newman points out, Milman's determination to conceive his subject in a purely external historical way led to the suppression of some of its most important aspects, of which this is certainly one. On the other hand, there is a whole school of Fathers with whom the forgiveness of sins, if not quite so completely thrown into the background as with Milman, is very far from being the centre of Christianity : it may almost be said in general that to converts from Judaism (and from forms of Christianity which may be said to Judaise) forgiveness is the important point, and deliverance and a new life to converts from heathenism (including the Neopaganism of almost all civilisation since the Renaissance). The fact is that it is much easier to be judicial when in possession of a complete system guaranteed by tradition and external authority than when a thinker has to construct one for himself out of a mass of incoherent texts and precedents by the aid of two or three principles with nothing to co-ordinate them. And this is the reason of Newman's severity to Erskine and Abbott. Their principle that nothing is admissible as dogma which cannot be translated into devotion might almost seem legitimate as the converse of the famous canon "Lex orandi lex credendi," but in their hands this principle was a solvent of traditional orthodoxy, so they and their principle are branded as rationalists, whereas in truth they are no more rationalist than their critic when he makes forgiveness of sins the key to Christianity ; the fact is, all three are Protestants. Another very remarkable feature of the essay on Milman is

the way in which the reviewer meets the attempt of that author to get rid of three-fourths of the doctrines and practices of the post-Apostolic Church by pointing out analogies (mostly fallacious) outside of Christianity. He sees that the analogies are fallacious, but he does not stop to prove it ; he is willing to grant that they are genuine, that the Church really adopted these ideas from without, he only contests Milman's inference. Milman argues, "If so, it is so much the worse for the Church." Newman answers, "No, so much the better for the ideas which the Church has consecrated." This way of looking at things gives ecclesiastical authority all the advantages and all the disadvantages of flexibility.

The essay on the Catholicity of the Church of England is certainly one which believers in its doctrine would wish to have forgotten. Doctrines present themselves now full-grown, and Anglicanism among the rest : they walk the world unveiled, seeking believers where they can find them, alluring them by their sweetness, fascinating them by their stringency, subjugating them by their authority, rejoicing if they meet with any already half-converted by his habits or his desires, but willing to accept any convert as he comes, and to transform him afterwards. Newman, on the contrary, insists upon a preparation of the heart as a preliminary to the legitimate assent of the intellect such as no school of religionists ever ventured to demand except the earlier and better Jansenists, and even they undertook to reward by a certainty. Dr. Newman in 1840 knew the Fathers much too well to attempt to establish the Anglican position as certainly orthodox. And yet he was so much under the dominion of his inherited position as to take some kind of comfort in the thought that the claims of Rome were equally uncertain. He actually looked forward to bringing over his countrymen to the practical reception of a system morally and intellectually most exacting, and at the same time neither satisfying nor stimulating, although he could offer them nothing more than a presumption that their service was after all acceptable, and did not dream of denying that it was more than possible that, when they had done all, they would be still in heresy and schism. Pascal and Butler had contemplated the possibility of the believer being wrong, but even Pascal imagined no worse consequence of the error than that the Christian might find he had lost this world for nothing ; to Butler, who thought it established that one ought to practise the virtues of Epictetus upon any hypothesis, the probability that his rudimentary Christianity was true could only be clear gain. The epilogue to this depressing production is a series of admirable reasons for dismissing the "dreary" question about Parker's consecration from the controversy between Rome and Canterbury : it is remarkable that even in this context it seems not to have occurred to the writer to examine the controversy between Rome and Constantinople, which turns exclusively upon questions equally "dreary." It is hard to say to what extent the notes are intended to be taken as complete, whether they contain all that Dr. Newman is inclined to add or the least that he thinks sufficient to neutralise what now seem old mistakes. Even on the latter theory they give the impression of a strange repose, as if the gigantic struggles of the author had been crowned at last by the inestimable blessing of being able to believe without having to remember why. He does not appear careful to refute his former self : he is satisfied when he has shifted the burden of proof.

The other essays must be briefly dismissed. The first on poetry is, if an horribly irreverent word may be pardoned, "dannish," its Platonism consists in a confusion of moral excellence with the poetical ideal ; it is chiefly valuable for the observation that Byron's reputation rests largely on his rhetoric. In the third, the "fall" of Lamennais is treated

* It is interesting to know that Mr. Abbott profited by the condescension, vol. i. p. 100.

without any of the sympathy which later revolts have excited among the representatives of Dr. Newman's old opinions. The fifth, on the theology of St. Ignatius, is an admirable piece of dialectical exposition : in the note the authority of the shorter Greek text is maintained against that of the Syriac by the usual conservative arguments ; it was hardly to be expected that the writer should have followed the details of the controversy. For instance he does not mention the acute argument of Dr. Lightfoot from the variation in the superscriptions. The sixth, on the prospects of the Anglican Church, has been falsified by events. The author over-estimated the power of the school he founded, and he under-estimated the power of the traditional religion of England for both resistance and reaction. In the seventh, after summing up Dr. Caswall's statistics, Dr. Newman rebukes the Anglo-American Church for making a fetish of the Prayer-book, though he himself makes such a fetish of the parochial system as to be shocked to learn that the congregation always pay for their seats. In the eighth, the biographer of Lady Huntingdon and her surroundings are exposed with adequate severity : her ladyship is treated with incomprehensible generosity. The tenth summarises Dr. Todd's history of the origin of the superstition that the Pope is Antichrist, and reinforces his arguments by an ethical comparison of Bishop Newton and others, who made this superstition popular among Anglicans with some saints of the Counter-Reformation. The twelfth is a spirited review of Bowdler's *Hildebrand*: it has an appendix (from Father Ryder's reply to Mr. Ffoulkes) on the false Decretals, which does not contain a retraction of the statement in the text that St. Gregory VII. exceeded his legitimate powers when he deposed Henry IV., as much as Henry IV. did by deposing him. The admirable essay on Mr. Davison will leave, at least on those who did not know him, an impression that the writer was led to overrate his abilities by reverence for a singularly deep and earnest character. The fifteenth, on Keble, written for the *Dublin Review*, *apropos* of the *Lyra Innocentium*, contains a wonderfully just and delicate appreciation of one from whom the writer had so recently parted.

G. A. SIMCOX.

Travels in Baltic Lands. [*Utads a Balt-Tenger Vidkein.*]
By P. Hunfalvy. Pest : Rath.

M. PAUL HUNFALVY is one of a small body of philologists in Hungary who have received from their less scientific countrymen the nickname of "Finn hussars," from their insisting on the claims of the Ugrian dialects to kinship with the Hungarian language. It would therefore be *a priori* probable, even if we were not expressly told so in the preface, that the attraction which drew him to the shores of the Baltic was a desire to make personal acquaintance with the closely related populations of Estonia and Finnland, whose dialects he had studied so long. At the same time, St. Petersburg, Stockholm, and Copenhagen were, as he says, too important points to be left out of a picture of that part of the world. His visit was made in the year 1869, and he was thus enabled to take part in the jubilee of the emancipation of the Est peasants, and in the Fourth Prehistoric Congress, held at Copenhagen.

The book has the defect into which many travellers fall, of mixing up personal experiences with statistical and other information which it scarcely requires a journey to collect. Considerable portions of it are evidently adapted to the meanest understanding. For an author to be able to assume on the part of his readers complete ignorance of the subject treated of is, to some extent, an advantage. It has enabled M. Hunfalvy to treat such questions as the geography of

Finnland and the mutual connection of the Ugrian languages with a completeness which but few English writers of books of travels could venture on. Anxious to give the Hungarian public as much solid information as possible, our author has occasionally overloaded his pages with indigestible statistics, occasionally dwelt at length on subjects which scarcely come within the scope of his book, e.g. the emancipation of the Russian serfs.

The Baltic Provinces of Russia are a part of Europe comparatively little known, and what is known of them is derived from German sources alone. M. Hunfalvy himself is by no means a witness biassed against the Germans. In the first place he belongs to that party among the Hungarians who think their country's safety and prosperity best secured by a strict alliance with the German element in Austria. Like the great majority of his countrymen, he, too, shares in that feeling, half terror, half hatred, with which Russia is regarded in Germany, not to speak 'of more western countries. And he is withal a philologist. Still, the picture he gives of the country is drawn from a point of view so different from the Teutonic that the proportions of the various objects are materially altered. Nor does our author ever forget his own countrymen, or leave unimproved an opportunity of calling their attention to their many shortcomings. As he justly remarks in his preface, it is not good for the Hungarians to be always casting longing eyes on the power and greatness of fully developed nations, as it is easier to learn from them the airs of sovereignty and superiority than the means and methods by which they made themselves powerful. On the other hand, smaller and obscurer peoples afford oftener an instructive example of conscientious labour and a rational accommodation to the force of circumstances. Further, for a Hungarian, in whose country several nationalities struggle for existence of which even the strongest is not perfectly assured, the study of similar phenomena in other countries is full of instruction. The instances of Estonia and Finnland are the more instructive on account of the contrast each presents to the other. The Est nationality in Estonia and Livonia was for centuries subject to the heavy yoke of servitude imposed on them by the feudal lords who represented the German conquerors of the country. The two provinces were continually exposed to Russian invasion while under the rule of the Teutonic Order, of Poland, and Sweden. Since 1819 the Est has been emancipated from servitude, but he is still subject to the many social disabilities which the feudal system leaves behind it. Finnland, on the other hand, appears in our author's pages as an illustration of the dictum, "Happy is the country that has no history." Once conquered by Sweden (1157-1293), and subjected to the same system of government as that country, she had no reason for attempting to revolt. The most disastrous period of her history was that of her gradual annexation by Russia (1714-1809). Here it is worth observing that the Finns speak of the final annexation of their country by Russia as the recovery by Finnland of the portions first conquered. The fortunate geographical position of Finnland, lying as it does outside the main stream of European political movements, renders the relations between Finnland and Russia almost as friendly and wholesome as those which formerly existed between Finnland and Sweden.

Our traveller opens his book with a short description of the impressions made on him by the singular mediæval aspect of Danzig. His journey by railway to Königsberg affords him an opportunity of giving a brief sketch of the history of the Teutonic Order as well as a fellow-passenger's opinion of the Poles, whose history he considers an instructive warning to the Hungarians. In

Königsberg he is, of course, struck with the stamp the Hohenzollerns have left upon Prussia, and then hurries by the railway to Riga, the first point of his journey where he comes in contact with the Ests. But the elaborate German mediæval constitution, both of the city and the province, detains us for several pages. From Riga the author proceeds by sea to Reval, then by travelling all night arrives in Dorpat in time to witness the jubilee of Est freedom. Everywhere he finds traces of the subordinate position of the Est, and the prejudices entertained on the subject by the German *bourgeoisie*. Many of the citizens of Dorpat had expressed no little anxiety with regard to the behaviour of the *kuule*. This Est word, the imperative of the verb "to hear," is in Estonia used by the Germans to designate the peasant. Before the Emancipation Act of 1819, peasant lands could only be let to Ests or Letts; the few Swedes and Russians in the three provinces being placed in this respect in the same category as the privileged Germans. On his way back to Reval by a different route, M. Hunfalvy traverses the country to which have attached themselves the mythological names of the Kalevipoeg, an inferior version of the Kalevala preserved by the Ests. From Reval he proceeds by steamer to St. Petersburg, to which capital he pays a flying visit, still keeping in the society of Ests and Finns, and from thence by like conveyance to Viborg, and from Viborg to Helsingfors. The farthest point in the interior of Finnland to which he penetrated was through Tevastehus to Tammerfors, and from thence to Abo on his way to Stockholm. His journey through Finnland was for the most part a succession of visits to fellow-philologists, of some of whom he had already made personal acquaintance during their visits to Hungary. Under such circumstances it is perhaps not to be wondered at that his pictures of the countries through which he hurried are somewhat too rose-coloured. Even of the Russians, his hostility to whom he does not disguise, he speaks with respect when he comes personally in contact with them. As to the Swedes and Danes he observes that the standard of comfort among them is superior not only to what he was accustomed to in his own country but even to that of Germany; and at the Prehistoric Congress he was struck by the superiority in stature and appearance of the Danes over their guests.

On two occasions he was gratified by a spontaneous and unexpected recognition on the part of Finns of their relationship to the Hungarians. In one case it was a small farmer in the south-western corner of Finnland who entertained him on the strength of their kinship, which fact he had learnt through the medium of a Finnish periodical. In the other instance a colonel in the Russian army, who had taken part in the war against Hungary in 1849, told him that once during the campaign he particularly wanted to get some butter, but the Hungarian peasant-woman in the lonely *puszta* understood neither Russian nor German. In his eagerness he addressed her in Swedish and French, forgetting that these languages would be still more foreign to her. At last in his impatience he exclaimed in Finnish, *Anna minulle voita*, "Give me butter." Word for word the Hungarian translation would be, *Adj nekem vajat*. The similarity in sound of the two accusative cases at the end of the sentence was sufficient to enable the peasant-woman to understand and comply with his request.

The most interesting portion of the book contains an account of the preservation and discovery of the old poetry of the Ugrian peoples. After Lönnrot had written for two whole days from the dictation of a peasant in Russian Finnland, who was eighty years of age, the old man exclaimed, "Ah, Sir, not one of my sons will become a singer as I did after my father; they prefer the vile new-fangled

songs with which I would not soil my mouth. Of the old songs which I learned in my youth I have forgotten the greater part, but if you had come in the days when my father was a fisherman in the lake of Lapukka, you would not have been able in two weeks to write down what he knew." Tears welled into the old man's eyes as he thus spoke, and Lönnrot himself could hardly control his emotion. As for the songs of the Voguls, the Hungarian traveller Reguly arrived just in time to collect the last of them. When Ahlqvist visited that country only ten years later, they were already forgotten. With regard to those of the Ests, M. Hunfalvy himself quotes from one of their own songs:—"As for the lays of old time, a thousand have been scattered to the winds, a thousand buried in the snow, a thousand have gone down into the tomb, and the fourth thousand slavery hath destroyed; as for those which the *munk* (knight of the Teutonic Order) swept away, the prayer of the priest overwhelmed, a thousand tongues were not able to recount them."

Whatever may be the fate reserved for the Ugrian peoples and their literatures, the sympathy felt for them by their Hungarian kinsmen (a result of philological culture which M. Hunfalvy's book seems intended to popularise) is a pleasant incident of the development of "nationalitarian" consciousness.

ARTHUR J. PATTERSON.

The Drama of Kings. By Robert Buchanan. Strahan and Co., 1871.

In the decline of Greek art there arose an interesting school of painters who were called *ρυταρούραφοι*; their Parisian successors are known as realists. They painted still life with a predilection for rags and dunghills, and women whose hearts were better than their reputations and their circumstances. A few years ago the large and estimable class who are always on the watch for the coming poet believed that Mr. Buchanan was about to inaugurate a similar school of poetry, and rejoiced that the costermongers had found their Wordsworth. Of course the ideal calm and dignity of Wordsworth's dalesmen was neither possible nor desired; but London life abounds with situations which no one had dared to treat, and which, if treated with courageous sympathy, could not fail to be effective. Mr. Buchanan knew how to present the outside of a heartrending tragedy of the gutter or the garret with frank minute fidelity, and how to ventriloquise from inside of it with eloquence which was sometimes prolix and generally shrill, but always too inventive not to be telling. His admirers naturally expected that having struck a fruitful vein he would continue to work it; but they were mistaken, and really they ought to have known better. His *Undertones* had shown that he already possessed the inclination for transcendentalism of subject, though he had not yet learnt elevation of handling, and had to fill up a well conceived classical outline with stuff that a schoolboy might write for a music-hall. In the *Legends of Inverburn* he endeavoured without much success to relieve the homely texture of the idylls by the juxtaposition of weird mediæval grace; but the attempt itself was significant. The *Book of Orm* with all its elaborate indolent incompleteness of execution, and its multitude of metrical experiments, which owed more to the printer than to the poet, showed that the attempt was not unwarranted: the writer's ingenuity was as unmistakable, though not so conspicuous, as his fervour; he showed he could imagine as well as insist. One poem, *The Lamb of God*, even recalls the *naïve* audacity of Blake, though it has little of his swift fiery child-like subtlety. The *Drama of Kings* will confirm the impression which must have been left upon more than one reader of the *Book*

of *Orm*. Mr. Buchanan is essentially a spasmodic poet. His affinities are with *Festus* and *A Life Drama* and *Balder* and *The Roman*. He is free from the vagueness, the perplexity, the obscurity of his predecessors; he always writes as if he knew what he had to say, though Mr. Bailey's surviving admirers would probably maintain that that gentleman had something profounder to say if he could only say it; as compared with other poets Mr. Buchanan is long, as compared with his predecessors he is not tedious. The curious thing about him is that in his growing exaltation he should have almost exactly reversed the stages through which Mr. Alexander Smith subsided into a *littérateur*. But with these minor peculiarities he has all the essential characteristics of the school, its profusion of forcible conceits, the far-fetched paradoxes of its rhetoric, which serve to adorn and disguise its commonplace conceptions, and with these the disinterestedness, the genuine elevation, which comes of being habitually exercised in great matters which are too high for a man, and above all the perpetual excitement, the fever of composition, which is as nearly related to inspiration as pruriency to passion. The delirium of this fever has its disadvantages and its compensations: it inflames the mental vision till it is incapable of appreciating the delicate harmonies and the noble repose of the ideal, or the real either for that matter; it flushes everything beautiful or no with a radiance that sometimes for the reader and always for the author supplies the place of beauty. Mr. Buchanan tells the adept in his note on mystic realism that he has hardly patience to read a book or look at a picture, and we who are not adept might have believed it even if we had not been told. At the same time it would be a mistake to suppose that in his more ambitious works he is remarkable for his independence of writers who had gone before him. It would be unreasonable to ask an *improvvisorato* to be scrupulous in avoiding plagiarism. Only those who are calm enough to enter into the ideas of others are calm enough to foster their own till they are fit to appear full-fledged without the aid of borrowed plumage. Mr. Buchanan is quite considerable enough to have a manner of his own, at present he seems to be falling more and more into the least admirable manner of the author of *Songs before Sunrise*.

He is quite right in asking us to read through each play of his trilogy, or, if possible, the whole, at a sitting. This brings out the principal artistic merit of the volume—the skill with which the writer can strike into a new key at the beginning of a chorus, and relieve the passion, too often the coarseness, of the preceding scene. Besides, what was written eagerly ought at any rate to be read rapidly, so that the reader may be carried quickly over the roughness and vulgarities and prolixities that disfigure the rendering of a series of moods, which seem as if they might be elevated, if not subtle, but for the pervading lack of nobleness and intensity of expression, a lack not to be compensated by any amount of vigour, or ingenuity, or metrical fluency. The volume begins with a dedication to Auguste Comte: it is a hymn on the martyrdom of Paris, sweet, stately, solemn, and at least three times too long for its ideas. Then a proem full of empty double rhymes, a luxury the writer should leave to Mr. Swinburne, who can get at it without giving more than it is worth. Then a prelude in Heaven which serves its purpose well enough, being grandiose and inoffensive. A prologue spoken by Time, who announces himself at the end as Death, comes next: it is upon the whole impressive—it reminded me of Tennyson's *Tithonus*, but the impression remained. The first play of the trilogy shows Napoleon at Erfurt; the insolent *bonhomie* which he liked to affect is caught well enough. The admirers of

Louisa of Prussia will be disconcerted to find her celebrated appeal to Napoleon at Tilsit turned into a parody of a Shakespearian scolding-match, in which all the sovereigns at Erfurt take part. The anachronism is nothing, perhaps the aggravation of Napoleon's brutality is not much, but the writer has vulgarised his heroine. The dramatic climax of the play is that Napoleon quarrels with the pope, and is cursed by a cardinal, whereupon the chorus of spirits debate with really lyrical ingenuity whether they shall echo the curse. Napoleon soliloquises at great length on—

“What men call Liberty, and Gods call Peace.”

The thought of this soliloquy is admirably resumed in a choric interlude called the Titan, which is much the best thing in the volume: it is well conceived as a whole, and though the beginning may be rather overloaded, it grows up to perfect simple sweetness at last: it is, of course, too long to quote entire, and it would be cruelty to mutilate it. *Ost sic omnia.*

The second part of the trilogy has less action than the first. Napoleon at Wilhelmshöhe hears news, and moralises and discusses the situation with a bishop, who states the cynical view of the strength of Catholicism with a certain imaginative *verve*. The ex-emperor is plausibly represented as a kind of pottering fatalist, who would be acute if he were not puzzle-headed and superstitious, who would be devout if he were not sceptical, and benevolent if querulous egotism had not made him heartless. It is superfluous to add that a great dramatist does not start with a string of adjectives, and try to animate them. The second choric interlude is on the refusal of English intervention. The first half is good political verse, musical, eloquent, passionate; the second a dull description of the perfect state, in the metre of Hood's *Bridge of Sighs*.

The beginning of the third play shows the advantage of remoteness of subject. Mr. Buchanan is quite right in thinking that the greatest art is never in revolt against the age which produces it or anxious to emancipate itself from its spirit; but he forgets that great art is generally the expression of a great epoch, and that artists of an epoch which is not great may do well to fly from what they cannot subdue, and what is hardly worth subduing. For himself he is resolved to idealise the present by foul means or fair; he will not look for a period in which women might meet and appeal to the chief of an invasion; he will introduce the sisters of the red cross wrangling with Bismarck, who, of course, forgets that he is speaking to ladies, and overwhelms them with foul and elaborate invective. If Mr. Buchanan did not think that a poem ought to be a pamphlet, and were not too earnest to study the appropriate, there are germs of fine things in the scene. A scene between the chorus and a deserter and several odes have something of the heroic extravagance of Victor Hugo. The chancellor's soliloquy and the scene between him and a deputy from Paris (Thiers and Favre rolled into one) recall the best heart-searchings of our esteemed contemporary the *Spectator*. There is nothing else to remark but Lucifer's statement in the epilogue that he took the parts of Bismarck and the two Napoleons because no one else would.

In a second edition, if Lucifer must tag his speech with Greek, the title had better be *δρᾶμα κοράνων*, and as Mr. Buchanan seems particular about acknowledgments, he had better remember that his dedication is in the metre of Mr. Browning's *Aben Ezra* (which had been already used for two hymns in the *Christian Year*), and that Shelley's *Hellas* is “a serious attempt to treat great contemporary events in a dramatic form,” and is certainly not more unreal than the *Drama of Kings*. The main faults of the book are

incurable, but the writer is not too old to learn. If he will clear his head once for all of his inflated notion of what poetry in general and his own poetry in particular ought to be, and would feed his imagination on something wholesomer than humanitarian rant, he might come to write verse that will live, or, if it is too late for that, he might come to leave off writing verses.

G. A. SIMCOX.

NOTE.

The Lord Chief Justice of England has undertaken to sum up, in a series of critical articles, the whole of the circumstantial evidence respecting the authorship of the *Letters of Junius*, including that of handwriting, as lately brought forward by the Hon. E. Twisleton and Mr. Chabot. The first article of the series will be published in our next number, January 15.

Art and Archaeology.

Raphael of Urbino and his Father, Giovanni Santi.
By J. D. Passavant. Macmillan, 1872.

THE coming of the New Year is now always heralded by the appearance amongst us of the richly illustrated gift-book, but it is very rarely that the New Year brings us a work of that class so excellent in its kind as the present volume. The only fault to be found with it is that the character of the contents is not sufficiently indicated by the title. The title leads us to expect a translation of Passavant's work, *Raphael von Urbino und sein Vater Giovanni Santi*, a book which, though possessed of independent literary merits, is pre-eminently a work of learning and research, for both in the French and German editions passages of general interest are buried out of sight beneath the conglomeration of professional criticisms and catalogues necessary to fit the work to take its place as a permanent authority and book of reference for students. Such professional criticisms and catalogues have been by the present translator and editor carefully suppressed, and the volume entitled *Raphael of Urbino* is not a translation, nor even an abridgment, of Passavant's book: it is not and does not assume to be intended for the use of students; the title can mislead but for a moment, and the briefest inspection reveals a magnificent *Prachtwerk* of a very high order of merit, especially calculated for the pleasure and profit of intelligent amateurs.

Twenty good engravings by some of the best artists, from some of the finest works of Raphael, have been admirably reproduced by the Woodbury autotype process. These engravings form the distinguishing feature of the book. The text indeed in all works of this class must necessarily be subordinate to the illustrations, and is usually vastly inferior to them. This last, however, is not the case in the present instance, as the photographs are accompanied by selections from the standard work of Passavant. Every passage of interest to the general reader is to be found in these pages. The preface to the German edition is given entire, and is succeeded by four chapters which contain substantially all that is known of Raphael's parentage and of his short and brilliant life with its varied relations and changing circumstances. The valuable chronologically arranged catalogue of his paintings follows, then comes a table of the same arranged according to subject, and the book is completed by a careful alphabetical index to its contents. From the popular character of the work it will be readily inferred that Raphael is regarded almost wholly as a painter, for unfinished work, even by the greatest of all

popular painters, has but a limited public; the catalogues therefore of his sketches and drawings, which would have weighted the volume to no purpose, have been omitted.

The translation, which has been very conscientiously done, shows even signs of something more than mere painstaking exactness, and though each word seems to have been carefully chosen, the language is markedly free and simple. Nay more, it preserves too something of a certain quaint charm of diction which exists, it is true, in the original, but which could only have been perceived and caught by a person of cultivated taste. Amongst the illustrations which have been selected so as to exemplify the different stages in the development of Raphael's genius, three may be specially mentioned as less well known to the public, and as being also particularly successful in point of reproduction, viz.: the Madonna of the Alba family, in the Hermitage, from the engraving by Desnoyers; the Christ on the Cross, in the possession of Earl Dudley, from the engraving by L. Grüner; the Coronation of the Virgin, in the Vatican, from the engraving by Stölzel, in which we find almost the full wonder of strange compound of early mysticism with the admirable science of later days. The outside of the book is not attractive, but the type and paper, as in all works printed at the Chiswick Press, are remarkably excellent.

E. F. S. PATTISON.

MR. HOLMES' CONCERTS AT ST. GEORGE'S HALL.

THE five chamber concerts under the direction of Mr. Henry Holmes, the last of which was given on Wednesday evening, the 20th ult., at St. George's Hall, have proved some of the most attractive of the many attractive concerts which have of late made Michaelmas Term—to Londoners once musically a blank—the most interesting of the year. The programmes have shown research and judgment. A place has been found in every one for some specimen of a composer comparatively unknown or as yet unaccepted, or for some comparatively unknown specimen of a well-known and accepted composer; while the remainder has generally been made up of compositions concerning the merits of which learned and unlearned have long ceased to differ, even among themselves. Thus, at the first concert, opened by a thoroughly characteristic and therefore beautiful specimen of Haydn's quartets, and closed by another of Mendelssohn's, we had a third—for pianoforte and bowed instruments—by Brahms, to many the most interesting of living and producing musicians. In like proportion, like compositions by Gade, Schubert, Schumann, Cipriani Potter, W. Sterndale Bennett, and Walter Macfarren have been heard after and before others by Haydn, Mozart, Beethoven, and Mendelssohn; these being intermixed with shorter, if not always lesser, solos, vocal as well as instrumental, performed by competent singers or one or other of Mr. Holmes' *collaborateurs*. These are Messrs. Foulkes (2nd violin), Burnett (viola), and Signor Pezze, assisted, when a second viola is needed, by Mr. W. H. Hann. Over and above the individual excellencies of these *virtuosi*—the fable of the bundle of sticks has no application to musical performance—they have been brought together by a community of sentiment, and have, by long association, attained to a power of expressing it which would inevitably be missed in the continual utterances even of greater artists who did not stand in the same relations to one another. The performance of Beethoven's quartet in C sharp minor, op. 131, at the last concert, might be confidently cited as having exhibited conception, finish, and sustaining power that it would be impossible to surpass. The interest of these concerts has been greatly increased by the appearance at two of them of Mr. W. H. Holmes, a pianist known and esteemed as he deserves to be among "experts," but whose public performances have of late been too few. The enthusiasm with which he was received, especially at the last concert, will, it may be hoped, tempt him on to the platform a little more frequently in future. It is understood that Mr. Henry Holmes and his party have made arrangements for another series of concerts after Christmas.

JOHN HULLAH.

ART NOTES.

As French society reconstitutes itself, day by day, fresh gaps are perceived. The *Chronique des Arts* on the 10th December consecrates a notice to the memory of M. Émile Bellier de la Chavignerie, who died on the 6th February last, at the age of 49. His genius was distinguished by the rare union of zeal for laborious research with natural appreciative power in matters of art. He first became well known to the public by his charming biographies of Miger and Lantara. Only a few numbers of his *Dictionnaire général des Artistes de l'École française* have been published; and it is much to be regretted that his premature death should have put a stop to the completion of a task for which he had prepared himself by the arduous labours of twenty years. He entered an ambulance at the commencement of the siege of Paris, and through his untiring exertions for the sick and wounded, to whom he devoted himself, he contracted an illness which proved fatal.

Bernard-Romain Julien, born at Bayonne in 1802, died in his native town on the 3rd of last month. M. Julien was a pupil of Gros, but he very early abandoned painting for the lithographic pen, which has made him famous. In 1840 he published his first *Étude à Deux Crayons*, and achieved a popularity which never after abandoned him.

The *Moniteur universel* tells an extraordinary tale as to the preservation of the riches of Fontainebleau from the enemy. At the approach of the Prussians, M. Boyer, the *conservateur* of the *château*, hid every valuable in the labyrinth of cellars which exists beneath it. Prince Frederick Charles and all his staff were engaged for three months trying to find the treasure, without success; so they beat M. Boyer, stripped off his clothes, and put him in prison. As the article ends with suggesting that M. Boyer should be handsomely recompensed for running the risk of his life in the public service, we may hope that some one, in his zeal for the pecuniary interest of the honest *conservateur*, has embellished M. Boyer's statements. The *Moniteur* quotes as its authority no less a person than M. Pfnor, the well-known writer on the ancient *châteaux* of France.

The great room which precedes in the Bibliothèque Nationale the gallery in which is located the department "des Estampes," has been re-opened. Of old the walls of this room were covered by examples of the chef-d'œuvre of all the different schools. M. Henri Delaborde has now decided to have nothing but French work, in order to prove to the French, who are, he thinks, too inclined to think little of their nationality, that their own school is equal to all others.

In the *Gazette des Beaux-Arts* M. Firmin Didot calls attention to the curious similarity of style and subject existing between a picture now at Compiègne and a mark of the printer, Nicolas du Chemin, which is generally considered to have been designed by Jean Cousin.

In the annual report made by the abbé Cochet to the prefectoral administration of the Seine-Inférieure mention is made of the discovery of a Merovingian burying-place. Some of the tombs had been already violated, but still an abundant harvest remained to be reaped. There were found—38 vases of which 36 were pottery, 2 glass; a great quantity of coloured glass beads, forming a bracelet and two necklaces; iron was abundant, 14 lances, 8 axes, &c.; bronze yielded a vase, fibulas, 5 Roman coins, of which one was of Hadrian and 3 of Tetricus; gold was also very abundant; amongst various articles of less importance there occurred a pin for the hair set with lapis-lazuli, and 2 magnificent fibulae, decorated with garnets and filigree. The crowning treasure was a unique silver coin of Theodebert 1st king of Austrasia (534-548); it is an imperial coin, adapted for the barbarian king. We see a Merovingian prince thus

substituting himself in the Arles workshop for the Cæsars of Rome and Byzantium.

The ruins of the magnificent cathedral of the ancient town of Parthenion have come to light. A new road is in course of construction in the Crimea, which passes at the foot of the Aïon Dag, through a little eminence which has hitherto attracted no attention. In cutting through this elevation the workmen came upon walls. M. Stronkoff commenced excavations at once; the high altar has been laid bare, and a marble slab, which bears an inscription to the effect that the cathedral was built in the fifteenth century, during the episcopate of Theodore, in honour of the holy apostles.

Mr. W. Smith, vice-president of the trustees of the National Portrait Gallery, has empowered Mr. Redgrave to make a selection from his collection of water-colour paintings of as many rare examples as would illustrate the early period of the art. The works selected he has generously presented to the nation, and they will shortly be exhibited to the public at South Kensington.

Mr. Millais, R.A., has at this moment on the easel another large autumn landscape; and yet another, with figures, the subject of which is a ferry on the Tay. Mr. Leslie, A.R.A., has been painting a ferry on the Thames. The evening shadows over the river landscape are full of sentiment, and help the imagination to divine the story of the coming boat, in which a gentleman with two horses is ferried over, whilst a girl dressed in her riding-habit awaits him in eager expectation on the bank. A second picture by Mr. Leslie treats "Azaleas." Mr. Calderon, R.A., has been engaged on a portrait. Mr. Watts, R.A., has been modelling a life-size figure, "Psyche." Miss Durant is engaged on a portrait bust of a daughter of Mr. Frederick Lehmann.

M. Charles Blanc, director of the fine arts, has just received the sanction of the government for his scheme of forming at Paris a collection of copies which is to represent all the most important pictures of foreign galleries.

Several of the most important portions of the Louvre have been re-opened, viz., the Musée des Antiques; the hall of the Roman emperors; the small room of Diana with the doe, which unites that part of the Musée des Antiques which is in the old Louvre with the ground-floor of the Louvre of Louis XIV.; and also the nine rooms of the Musée Napoléon, in which the Campana collection is preserved.

The opening of the Salon for the exhibition of paintings is fixed for the 1st of May. Some remarkable alterations have been made in the conditions for the admission of works. First, there are to be no *exempts*; next, there are to be two classes of medals, and one grand medal to be conferred on the most important of the four sections; then, the jury is to be composed of members of the Institut, to whom the actual holders of medals will add a certain number of artists; finally, the entry will be gratuitous.

The bronze statue of the late Lord Holland, the work of Messrs. Watts and Boehm, will shortly be erected in the centre of the south side of Holland Park. Part of the park wall has already been removed.

The auction of the duplicates of the etchings and engravings of the Berlin Museum has been so far a great success. Dürer's "Hieronymus in his Cell" fetched 70 thalers. Tiny leaves of Altorfer hardly an inch square went for more than 26; the "Adam and Eve" of Burgmair for 70; the "Adam and Eve" of Marc Antonio for 70; this, too, was a damaged example.

An exhibition of pictures representing the principal episodes of the history and siege of Paris has just been opened, 11, rue Le Peletier.

The committee formed for the erection at Macon of the statue to Lamartine has selected the Place de la Barre for the site.

It has also been decided that the statue shall be cast in bronze, although marble, "qui a les étincelles, les rayonnements et la pureté du génie de Lamartine," would have been preferable, did not its beauty suffer so soon from the influences of climate.

Baron Seymour Kirkup's library was brought to the hammer last week in London. The Baron was the hero of the discovery of the portrait of Dante, painted by Giotto on the wall of the Podestà at Florence (see *Academy*, vol. ii. pp. 59, 60). One of the most interesting items of the sale was a volume of the *Amoroso Convivio*, on the inside of the cover of which was a small but accurate drawing of the fresco of Dante, before it had been destroyed by modern restoration. The book fetched 5*l.*

The exhibition of Old Masters at the Royal Academy this winter promises again to be of great note. The Queen has lent twelve pictures, amongst which is a Holbein and a Vandyck. The Duke of Buccleuch, Sir Richard Wallace, and Mr. Baring have also liberally permitted selections to be made from their collections.

Selected Articles.

HANS LÜTTZELBURGER, Le Graveur des Simulacres de la Mort d'Holbein. Édouard His. *Gazette des Beaux-Arts*, December, i, 1871.

Ein Manuscript über die Statuen im Belvedere, C. Justi. *Preussische Jahrbücher*, December 1871. [The manuscript from which this article derives much of its interest was preserved in the library of the Columbia Society at Florence. It appears to have been the joint work of Mengs and Winckelmann, and is especially noteworthy as throwing light on how much Winckelmann owed at first to the special knowledge of men like Mengs and Stosch.]

Die Basilica Julia am Forum zu Rom, A. Klugmann. Im Neuen Reich, No. 50, 1871. [A careful and exact report of the excavations and restorations now going on under the direction of Signor Rosa.]

Gött. gel. Anzeigen (Dec. 6) reviews Michaelis' important book on the Parthenon, which contains all the materials, and carefully distinguishes between what is certainly known and what is merely probable or possible. The reliefs on the east side represent the battles of the Giants; on the west those of the Amazons. The north side seems to contain Trojan scenes. The reviewers think it probable that the south side was devoted to the Argonauts. A careful analysis of the whole book is given.

Nachrichten, Nov. 29.—Sauppe discusses the inscriptions lately found in the temple at Selinas, which he thinks is a temple of Zeus Agoraios. Demeter is called Μαλοφόρος, Persephone Πασικράτεια, Ares perhaps Φέβος. The β in the word has the curious shape which accounts for φέβος and φέρος being confused. The inscriptions seem to belong to the beginning of the fifth century B.C.

Literarisches Centralblatt (Dec. 16) notices Ilg's edition of Cennius Cennini's Book of Art (he was a painter of the Florentine school in the 14th century), and Allihi's Studies on Albert Dürer, at some length. The former is part of a collection of books on the history of art; and the reviewer recommends a similar collection for architecture, e.g. as to the first development of the Gothic in England and France, Suger's chronicle of his administration, and Gervasi's book on the burning and restoration of Canterbury. The latter tries to ascertain Dürer's meaning from the ideas of his time and the literature to which he had access, and is a good instance of the historical method.

New Books.

ALMANAC BREIZ-IZEL. (Almanac of Lower Brittany for the People, 1872.) Brest: Gadreau. (Paris: Franck.)

ARCHIV FÜR LITTERATURGESCHICHTE, herausg. von Dr. Richard Gosche. Bde. 1 und 2. Leipzig: Teubner.

ARNOLD, Georg. Das Werk von Georg Christoph Wilder Jun., Maler und Kupferätzer in Nürnberg. Nürnberg: Korn.

BROWNING, R. Prince Hohenstiel-Schwangau, Saviour of Society. Smith, Elder, and Co.

BRUYN, Abraham de, et COLYN, Michel. Recueil de Costumes civils, militaires et religieux du xvi^e siècle, d'après. Reproduction photo-lithographique des éditions de 1577 et 1581. 40 planches, 4°, en portefeuille. Bruxelles: Van Trigt.

CAHIER, Charles, et MARTIN, Arthur, des RR. PP. Mélanges d'Archéologie, d'Histoire et de Littérature. Collection de Mémoires

sur l'orfèvrerie et les émaux des trésors d'Aix-la-Chapelle, de Cologne etc., sur les miniatures et les anciens ivoires sculptés de Bamberg, Ratisbonne, Munich, Paris, Londres etc. Paris: Poussielgue Frères.

CAHIER, le Père Charles. Les Caractéristiques des Saints dans l'Art populaire.

CHURCH, A., and BRODRIBB, W. J. Pliny. (Ancient Classics for English Readers.) Blackwood.

DESBASSYNS DE RICHEMONT, le Comte. Les nouvelles études sur les catacombes romaines. Histoires—Peintures—Symboles. Paris: Poussielgue.

DIPPEL, Jos. Handbuch der Aesthetik und der Geschichte der bildenden Künste. Regensburg: Manz.

DUMONT, A. Inscriptions céramiques de la Grèce. Paris: Imprimerie Nationale.

ELSAESSISCHE SONNETTE. Bâle.

GALICHON, Émile. Études critiques sur l'administration des Beaux-Arts en France de 1860 à 1870.

GERVINUS, G. Geschichte der Florentin. (New ed.) Vienna: Braumüller.

GERVINUS, G. Hinterlassene Schriften. Vienna: Braumüller.

GOETHE, Hermann und Dorothea. Mit 8 Bildern von A. v. Bamberg, photographisch von Hanfstängel, und Initialen von Caspar Scheurers. Berlin: G. Grote.

HAHN, J. S. von. Sagwissenschaftliche Studien. I. Lfg. Jena: Mauke.

HETTNER, H. Litteraturgeschichte des achtzehnten Jahrhunderts. 1^{ter} Theil: Englische Litteratur von 1660–1770. 3^{te} verb. Aufl. Braunschweig: Vieweg.

HISTOIRE de l'ornement russe du x^{me} au xvime siècle d'après les manuscrits. Paris: Morel.

KONEWKA, P. Falstaff u. seine Gesellen. Text v. Herm. Kurz. Strasburg: Schauenburg.

KUNSTSCHÄTZE DEUTSCHLANDS. Mit biograph. Notizen v. A. Woltmann u. B. Meyer. I. Bd. Leipzig: Payne.

LANG, A. Ballads and Lyrics of Old France, with other poems. Longmans.

LIEDER DES HASSES. Genève.

POOLE, F. Queen Charlotte Islands, a Narrative of Discovery and Adventure in the North Pacific. Ed. by J. W. Lyndon. With Map, &c. Hurst and Blackett.

REUSS, Rod. La Sorcellerie au 16^{ème} et au 17^{ème} siècle, particulièrement en Alsace, d'après des documents en partie inédits. Paris: Lib. Cherbuliez.

TAILLANDIER, Saint-René. La Serbie—Kara-George et Milosch. Paris: Didier.

TOEPPEL, M. Elbinger Antiquitäten. Danzig: Verling.

VIOLETT-LE-DUC. Dictionnaire raisonné du mobilier français de l'époque carlovingienne à la renaissance. Tome 2^{me}. Paris: Morel.

WEY, Francis. Rome: Description et Souvenirs. Contenant 400 gravures en bois, d'après les dessins de MM. Anastasi, Bayard, Delaunay, Henri Regnault, Ullmann, Viollet-le-Duc etc. et un plan de Rome gravé sur acier. Paris: Hachette.

WILKEN, Doc. Dr. E. Geschichte der geistlichen Spiele in Deutschland. Göttingen: Vandenhoeck und Ruprecht.

WINCKELMANN, F. F. Geschichte der Kunst des Alterthums, nebst einer Auswahl seiner kleineren Schriften. Mit einer Biographie Winckelmanns und einer Einleitung versehen von Dr. Julius Lessing. Berlin: Heimann.

Theology.

THE RELIGION OF ISRAEL. [De Godsdienst van Israel.] By Dr. A. Kuennen. Part I. Haarlem: Kruseman, 1869.

A STRICTLY historical description of the Israelitish religion is one of the fruits of modern critical theology. It was quite impossible, as long as the contents of the Old Testament were regarded almost exclusively as revelation. For revealed truth is inflexible, and can only be properly represented in the form of a dogmatic system, whereas religious ideas are bound up with the intellectual life of nations, and like it are subject to change; in other words, they have a

historical character. But although a strictly scientific method, as applied to the religion of Israel, is of modern origin, it is noteworthy that even the elder orthodox critics were able to distinguish something akin to a law of development. Who, indeed, could fail to observe that the outlines of prophetic religion were more distinct, and its affinities more evangelical, than those of Mosaic religion? The Biblical idea of the education of the human race was sufficient of itself to break up and paralyze the notion that the contents of Revelation must necessarily be of permanent validity.

Yet it must be owned that even those writers who have attempted to treat the religion of Israel historically have hitherto been very much inclined to presuppose the traditional authorship of the books of the Old Testament, and to assume that they are all of equal value as authorities for the ages to which they refer, rather than for those in which they were composed. And even if they admitted that the Hebrew writers had infused many ideas of their own time, the additions were regarded as unimportant. On the other hand, the critical basis (where such existed) of the earlier historical descriptions of Israelitish religion was easily shown to be untenable, as in the case of Vatke's *Biblische Theologie*, a work which did not deserve to fall so soon into oblivion.

The work we are about to review, from the pen of one of the ablest Dutch scholars, goes a step farther. Since it is the object of all science to make the nearest possible approximation to actual facts, we are bound, says Dr. Kuenen, as students of the religion of Israel, to investigate above all that portion of its contents which may be known with absolute certainty. This description, however, will not answer to Mosaism, though all other accounts of the Israelitish religion, not excepting those which follow an undogmatic method, begin with this period. It is extremely difficult to ascertain how much of the Pentateuch and its legislation really belongs to Moses, much more so than to sketch the broad outlines of the external events. For the very notion of a gradual modification, a Becoming, of religious ideas, is remote from those primitive times; we have no right, therefore, to apply a modern standard of historical fidelity to the early Hebrew chronicles. Consequently we must begin our investigation of the religion of Israel with the period which is comparatively well known to us, that of prophecy. Here, at any rate, we have access to numerous records, composed for the most part by the very men in whom religious enthusiasm reached its highest point, and who were animated by the religious idea in its greatest clearness.

And this is a point of view which cannot be reasonably impugned, especially when it is carried out with such learning and acuteness, such distinctness and moderation of tone, as in the work before us. Dr. Kuenen's method, therefore, is rather that of investigation than of description. The latter indeed corresponds better to the idea of a history, which seems to require a chronological thread, and the author will doubtless adopt this method as soon as we have reached a more definite knowledge of the earliest times of the Mosaic religion. But whichever method be preferable at the present moment, it is certain that we must decide at once whether we regard the books of the Old Testament as the absolutely faithful reflection of an immediate revelation, or as human writings, which exhibit the religious belief of the nation. The former is the older as it is still the popular opinion, and in its earliest stage, before it had received a logical precision, was not directly opposed to the latter. The author is quite right in insisting on the later view as the only possible basis of an impartial and purely scientific enquiry. Orthodoxy itself is obliged to exercise some criti-

cism on the contents of the Old Testament; since it regards Christianity as a more perfect religion than Judaism. It is obliged to distinguish between the belief of inspired and prophetic men and that of the people, and so to place the discourses of the friends of Job in quite another relation to the fountain of revelation than the words of Isaiah, though even in these it cannot yet discover the broad daylight of the Gospel, unless it is prepared to abolish the distinction of the divine covenants altogether. All these results are attained with greater thoroughness and completeness by the modern scientific method.

There is, however, another assumption on which our author in his introduction lays greater stress. He thinks we must regard the religion of Israel not as the principal religion outside Christianity, but only as one of the principal religions. It is difficult to see why this assumption should be of great importance for his particular task, which is simply to describe the Israelitish religion, not to compare it with others. Besides the antithesis is not precise enough. For if Israel had the principal religion, there may still be several other religions, which occupy an eminent position among their sisters. Before I have compared Judaism with these principal religions, I can say it belongs to the class of these principal religions. But if we are to estimate the comparative value of these religions, we cannot content ourselves with saying, This or that religion is one of the principal ones; but we must place it either above or beneath Buddhism, or Parsism, or Brahmanism. This is the function of the comparative history of religion, which has been so well described by Max Müller in his *Chips*. But our verdict, whatever it may be, can exercise no influence on our description of the religions themselves. It is another question whether the Israelitish religion alone is to be referred to a divine revelation, or other religions also. The former view is commonly regarded as that of the church, the mythology represented in the Greek and Roman poets being supposed to be the single source of the heathen religion; a view which conflicts with that of many of the fathers, who perceived traces of Christianity even in the heathen religions. As for the latter view, Dr. Kuenen rightly observes that it ought not to be based on the assertion of those who profess these religions. It rather depends—partly on the religious and moral *value* of a religion, which is determined by the contents of the latter—partly on a philosophical consideration of the origin and development of the various religions. For "revelation" points only to the highest *cause* of religion. The rejection of such a comparison of religions could only spring from the opinion that one religion alone was suitable for every race, but this error of the ancient world has been contradicted by history itself; not only Christianity, but also Islam and Buddhism, have passed from one great race to another; the alterations produced in a religion by such transitions are not fundamental. Another consequence of Dr. Kuenen's assumption is that he absolutely rejects the primary idea of "Jahvism," viz. that the Israelites were the chosen people of Jahveh. This position may be justified in two respects—1, in so far as the idea of election is merely an expression of national pride; and, 2, in so far as limited geographical knowledge made it impossible even for the prophets in their pictures of the future to bring the peculiar religious development of Israel into relation with the divine government by any other means. We must, however, guard against confusing the idea of election as originally conceived and expounded by the prophets with the fantastic notion of the Pharisees. With the prophets it denotes an act of divine grace, and involves more duties than privileges. We should also not forget that the limits of the religious community were ever much wider and more elastic than those of the

nation. Considered more closely, the idea of election seems to be the sound, though imperfect, expression of a vivid presentiment that the most distinguished rank in the religious development of humanity is assigned to this people—a presentiment which has also received the full sanction of history.

Following the method mentioned above, the author, in chap. i., describes the religion of Israel, as it appears in the great prophets of the eighth century. Jahveh is here the One God, who has chosen Israel, whom the nation has to obey, who declares his will distinctly through the prophets, and whose most conspicuous property is righteousness; in fact, we have before us the very essence of religion in all its grandeur and beauty. But this is not the only result to be gathered from the writings of the prophets. We learn, too, that the popular creed differed in many respects from that of the prophets. Jahveh was often forced to share his honours with other divinities; he himself was not yet recognised as the highest spiritual power; the popular conception brought him into too close a relation to natural elements, especially fire.

This mistaken and impure faith, which was often shared even by "prophets," is referred to repeatedly and in the clearest terms in the Old Testament. Dr. Kuenen has given an excellent picture of both kinds of the faith in Jahveh, although we should have liked to see many *momenta* in the purer creed (viz. the divine activity and the hope of salvation) drawn out at greater length. This slight deficiency, however, is almost justified by the fact that descriptions of the religion of Israel are still too often loaded with Christian and other foreign elements, which a strict historian and interpreter is compelled to disallow. In the second chapter, the author takes a retrospective view of the earlier eras. First, he gives us a historical survey of the history of Israel from the Exodus to the rise of the two kingdoms of Israel and Judah. Full and careful use is everywhere made of the latest researches. But little historical matter is found by the author in Genesis. This critical position approaches most nearly to Ewald's, combined with that of Graf, Bunsen, &c. He dates the Exodus B.C. 1320. In many points of detail we naturally differ from him, but we need not trouble the reader with all these, as the entire section refers to matters which must be presupposed, or, at most, sketched in outline, rather than proved, or drawn out at length, in a history of the Israelitish *religion*. One point only shall be mentioned. No doubt the purely genealogical view of history is "unhistorical" (p. 113); no doubt, too, geographical vicinity has often been converted into a proof of national kinship. But the numerous plurals and names of nations in Gen. x. prove clearly enough that the genealogists often intended to refer to nations and not to individuals, and the mere fact that the Philistines and Horites find no place in the framework shows that such writers were not by any means devoid of discrimination. On the other hand, we must beware of maintaining the converse; otherwise we shall have to deny any real affinity whatever, and forget that a nation is composed of families, and that a tribe might easily take its name from its first chief, or from the ruling family. There is no alternative but to subject each separate link in the genealogies to a searching examination, and it seems to us a mistake to allege the nature of the framework as in itself conclusive against an ethnological connection. Even the well-known capriciousness of late Arabic writers in the construction of genealogies (comp. Sprenger's *Life of Muhammad*) gives no better right to pass such a verdict. We hasten to add that this warning applies only to a very small extent to Dr. Kuenen, whose calm and temperate criticism is largely dis-

played in his treatment of this subject, but rather to other recent historians.

The third chapter discusses the formation of those communities of religious men incorrectly termed "the schools of the prophets," an important share in which, though scarcely one to be estimated precisely, belongs to Samuel. The author brings out very well the importance—often overlooked—of these communities; they continued long afterwards in both kingdoms, even in the time of the great prophets (Isaiah viii. 16), and were in many ways the chief support of the pure religion of Jahveh. Dr. Kuenen investigates with equal clearness "the Canaanitish origin of prophetism," which hitherto has not been adequately observed. It is true that the forms of Hebrew prophecy adduced for the purpose of comparison are the elementary ones. Not only did prophecy, through being spiritualised, receive quite other ideal contents than before, but its whole character was changed. No wonder that the Hebrew prophets, whose writings we possess, are infinitely remote from that primitive stage, and only the false prophets betray the origin of prophecy with comparative clearness.

The most difficult and at the same time most interesting question is discussed in the fourth chapter: What was the *earlier* development of the religion of Israel? Two views are possible, according to the author (p. 218, &c.). Either the impure elements in that religion were the consequences of a national *defection* from the pure and spiritual worship of Jahveh, or else they represent the original, out of which the more spiritual form developed itself by degrees through the agency of the prophets. Dr. Kuenen decides for the latter alternative. This view is supported by unmistakable expressions in the Old Testament, e.g. Josh. xxiv. 2, 14; Ezek. xx. 5; Amos v. 25, 26. And there is really no passage to be found where the whole people are said to have been faithful for any length of time to the pure worship of Jahveh. As the author very justly points out, Elijah and Elisha do not seem ever to have come forward against the calf-worship in the kingdom of Israel. Sensuous and spiritual elements are found side by side in the conception as well as in the cultus of Jahveh. The prophets indeed degraded the former into symbols, but they were once integral parts of the popular belief. Dr. Kuenen well illustrates this view by several usages in the worship of Jahveh, which reveal the early connection between Jahveh and fire in the popular mind, the bloody nature of his sacrificial ritual, and the absence of any specific distinction between him and nature-divinities like Molech and Kemosh. The view thus carried out in detail is in essential agreement with the opinion long current among critics, that impurities in the idea of Jahveh could not but tend to assimilate it to the type of the neighbouring divinities. It has also been generally recognised that a large number of the Pentateuch laws by no means institute new rites, but only modify or devise new motives for customs already in existence. Here, of course, we are restricted to conjectures, but to such as can be raised to a high degree of probability. Our author certainly deserves great credit for his description of the primitive popular belief. We think, however, that the distinction between the sensuous conception of Jahveh and the polytheistic requires to be drawn out still more sharply; we must not infer polytheism when we have barely proved the existence of other deities, not their worship. And even in the latter case we must still enquire whether these deities were co-ordinate with or subordinate to Jahveh. The discovery that monotheism and polytheism are by no means contradictory, but that the most various combinations and transitional stages occur, is the key to the comprehension of all the forms of historical religion, especially on Semitic soil.

But *how* did the sublime religion of the prophets develop out of this ancient popular faith? Was the latter the only germ out of which the former proceeded? Why, for instance, did not the religion of the Moabites, with which, perhaps, that popular faith had many points in common, develop in the same way? Was this great result produced, or, so to speak, distilled, in Israel by a kind of internal fermentation, which separated the spiritual from the sensual? Not a few are inclined so to imagine the process. It sometimes appears as if Dr. Kuenen were of the same opinion. But it is only appearance. New ideas, not involved in the popular belief, must have been introduced—ideas of sufficient power to effect a complete transformation in the several elements of the religion of Jahveh. And the representatives of these ideas were prophets. To what period, then, are we to assign the undisputed prevalence of that mixed popular belief? Dr. Kuenen recognises in Moses himself a prophet who introduced such new ideas. The period we are in search of must therefore fall before Moses, *i.e.* before the national life of Israel can strictly be said to have begun. But the tradition that Moses stood in a close relation to older and yet higher, and not merely Egyptian, conceptions of religion—is it a complete delusion? If it is not so, we shall arrive at those obscure times in which the Israelitish nation was gradually developed. And we shall be unable to deny the possibility of prophetic action even in those early times in the Semitic group from which the people of Israel sprang. A further question which arises is this: How far did the conviction of these ancient prophets deviate from the popular belief which they sought to transform? The answer is difficult, as we have no contemporary evidence for this primitive period. It is only too natural that scholars should differ on a point in which so much depends on conjecture. In the case of Moses, Dr. Kuenen admits unreservedly the fact of such a deviation, but he thinks that it did not go so far as the negation of image-worship and the assertion of the absolute uniqueness of Jahveh. If, however, we estimate the difference between Moses and the people at too low a rate, we shall hardly be able to explain the intense veneration for the former embodied in the tradition. The narrative of the golden calf is not so much a piece of historical evidence as the symbolical expression of the view that the priests took comparatively a slender share in this religious movement.

The picture of the early religion of Israel drawn by Dr. Kuenen appears at first sight to differ considerably from the ordinary one, though the former, as we have seen, corresponds pretty closely in its main outlines to the results as yet gained by criticism. The dispute is to a large extent about mere words. By the "religion of Israel" we may mean either the old popular belief marked with the stamp of heathenism, or the purer conception of the prophets. Which has the best claim to the title? In our opinion, the latter alone. The crude notions of the mass of the Jews have as little right to be called by this name as the religious ideas of the Neapolitan peasantry to be accepted as the standard of Roman Catholicism. Besides, there is no specific distinction between the popular belief of the Jews and that of their neighbours, while the expression "religion of Israel" is absolutely unmeaning, unless it sums up that which was peculiar and distinctive; in other words, the essential elements of the prophetic ideas. History itself imposes this condition. The Jewish nation, when arrived at maturity, have, through their representatives, only preserved those writings as records of their true religion which exhibit the higher and purer faith. No literary record stands only on the foundation of the old popular belief. Even the "Mosaic" laws were not generally recognised until Deuteronomy—a genuine prophetic work—had been appended as a key and corrective. As for

the purely religious point of view, it is at any rate justifiable in explaining the origin of the prophetic movement, since it is a mere evasion to reply that its leaders were religious geniuses; the continuity, consistency, and strangely transforming influence of the prophetic spirit cannot be accounted for by phrases of this sort. Of course this religious theory, true as it is, or rather because it is true, ought never to be allowed to check the course of historical enquiry; it can only be properly applied to illustrate the ultimate causes of historically developed facts. To speak of "revelation" at this point is allowed, or rather demanded, by science itself.

We know but little for certain as to the religion of primitive times, and the author is disposed to confine the true prophetic influences of the period within very narrow limits. It is probable enough that there were still many soothsayers of the class of a Balaam in addition to the prophets, and this is confirmed by the historical and prophetic books. Dr. Kuenen proceeds to describe the times of the judges and the kings, with the object of arriving at the average belief of the people themselves. His description is not incorrect; on the contrary, this part of his book contains some interesting contributions to criticism. It is not a declension from Jahveh, as the religious theory of the Book of Judges regards it, which characterizes the time of the judges; but the worship of the *local* deities by the side of Jahveh. The latter was recognised as the god of the nation and the country, but the lesser deities, the Baalim, stood in a more intimate relation. The more religious Israelites indeed had a special reverence for Jahveh, but made no attempt to disturb the other divinities; in short, even they did not regard Jahveh as the one only God, beside whom the gods of the heathen were things of nought (*Etilim*). This is proved in the cases of David and Solomon, Asa and Jehoshaphat. The exclusive recognition of Jahveh was first attained in the northern kingdom, when Jahveh was in danger of being supplanted by Baal as the one supreme God. This attempted revolution fortunately provoked a reaction, and the victory over the supreme Baal involved a victory over the lower Baalim. Not indeed at once, but gradually. These results have a rather monotonous aspect, in so far as the extent of Jahveh's power, rather than the mode of his operations, sometimes almost seems to form the only contents of the higher religion. The author does not go so far as to regard this notion (Jahveh *by the side of* other deities) as the only test of the value of this religion, as it is essentially an act of the understanding; still he is on the verge of doing so. The notion is in his view a sign of a "barbarous" age. Dr. Kuenen involves himself in some difficulty by placing the transition from a more than semi-heathenish form of religion to the pure conception of the prophets Amos, Hosea, and Isaiah as late as the ninth century. We are afraid this giant-stride is not sufficiently explained. He estimates the popular belief of the southern kingdom in no essential respect more highly than that of the north, although there was no struggle between Jahveh and Baal in the south analogous to that in the north, while the prophets of Judah even dwell with emphasis on the unique character of Jahveh. Another striking fact is that in the prophetic expositions of the latter doctrine there is scarcely any vestige of a conflict with Baal, although on Dr. Kuenen's hypothesis we might expect some such involuntary allusions. We may infer therefore that the importance attached to Jahveh in the popular religion of Judah is rather underrated by our author. It is equally improbable that a purer idea of the nature of God was preserved by tradition in a few families alone. The worship on the "high places" was certainly not altogether so "innocent" as many have supposed. Dr. Kuenen indeed accepts the judgment of the Book of Kings,

and regards the "high places" as entirely idolatrous. Were this, however, exclusively the case, the earlier prophets would certainly have been much louder in their denunciations. Besides, the command to worship Jahveh only in Jerusalem points to the existence of numerous sanctuaries consecrated to Jahveh, but too much withdrawn from the sacerdotal control. In short, the author has looked sharply after the dark side of Israelitish religion, but in so doing has missed much of the light. He follows the religious criticism of the historical books; indeed, his judgment turns out even more severe than theirs. On the other hand, he bestows much too little attention on the Psalms and the Proverbs. He deems scarcely any statements but such as are unfavourable to the state of religion historically "certain." But though it is impossible to fix the precise dates of the Psalms, it is highly improbable that no song of the collection falls earlier than the ninth century. And if even a part be earlier, it must be employed as a historical authority. The author's view that the more ancient portions of the Pentateuch were not in existence before the eighth century is equally improbable, and opposed to that of most critics. At any rate he cannot avoid the task of analyzing these records, with the view of detecting still more ancient records, and employing them in his description of early religion.

The foregoing criticisms are obviously directed not so much against the results of Dr. Kuenen's enquiry as against its completeness. They are not intended to depreciate in the least the great importance of his work for the scientific study of the Old Testament. No doubt he has dealt a severe blow to the custom of writing Jewish history from a dogmatic point of view. Truth, however, has sustained no real injury. Many, very many, of his details are still questionable; it could not however be otherwise, considering the abundance of the material. Each chapter is followed by valuable notes, which often contain long and important excursions, e.g. that on the chronology (chap. ii.), and the argument in proof of the genuine Israelitish character of the name and doctrine of Jahveh. We hope for an early opportunity of noticing the second volume; the present concludes with the Babylonian exile.

L. DIESTEL.

DISCOVERY OF A PSALMIST.

TO THE EDITOR OF THE ACADEMY.

SIR,—In the prayer-book of the Jews alphabetical hymns are of very frequent occurrence. It is an invariable rule with them to express the name of the author in the verses following the end of the alphabet. If the נ- or נ- verse (in case the alphabet is used in the inverse order) is followed by anything else, we are sure to find יְהוָה, or הַלְלָה, or פָתִיָּה, or some other name, marked by the acrostic.

If we apply this rule to Psalms xxv. and xxxiv., where the נ verse is followed by a single verse, which does not belong to the alphabetical arrangement, we are entitled to say that the author of Psalm xxv. was

one פָתִיָּה, the author of Psalm xxxiv. one יְהוָה, as of course the ה of הַלְלָה, Psalm. xxxiv. 23, did not originally form part of the text. Phadael is undoubtedly the person mentioned in Nhem. viii. 4 as a contemporary of Ezra, and who held a high rank in the Jewish community at that time. Phadaias might have been a brother of Phadael.

The orthography פָתִיָּה is as לְהַלְלָה, הַלְלָה. The name Phadael itself is written פָתִיָּה, Num. xxxiv. 28.

So for the first time the true name of a psalmist has come to light.
Göttingen, Dec. 6, 1871.

PAUL DE LAGARDE.

Intelligence.

Two of the most difficult German authors, Ewald and Dorner, have been singularly fortunate in their translators. The standing-point of the *History of Israel*, the third volume of which, in two parts, has just

appeared in a delightful English dress, received a careful appreciation in the *Academy* (vol. i. pp. 201–203). A similar attempt to "orientate" the reader of the *History of Protestant Theology* is unnecessary, in spite of the misconceptions which in England have gathered round the name of Dorner, because the main difficulty in understanding that author is caused by the obscurity of his style, which is reduced to a minimum in this very readable version of his most intelligible work. On the other hand, the principal obstacle to a just estimate of Ewald is, not the cumbrousness of his style, but his natural incapacity for discussion, a defect which cannot be remedied by any translation of his works, however skilfully executed. Without pledging ourselves by any means to agreement with all Dorner's views, we strongly recommend his *History* to those who are beginning the scientific study of theology. The third book, in particular, on the theology of the nineteenth century, deserves the closest attention of the student, who may be surprised to find how much critical and speculative liberality enters into the composition of a German "orthodox" leader. It is characteristic of the wide information of the author that he concludes his work with sketches of contemporary foreign theology. These are of very unequal merit, but none the less welcome, as indications of a broader conception of the history of theology than is perhaps common in Germany. The sketches of Dutch, Scotch, and English—or rather Anglican—theology are the least satisfactory. The best passage on the latter is the criticism on Dean Mansel (vol. ii. pp. 494, 495); the worst, that on *Essays and Reviews* (p. 406), where the author, strangely enough, deserts the very principles of exegesis which he has previously recognised. A severe article by Prof. Diestel in the *Jahrbücher für deutsche Theologie* is still the best thing which has been written on that celebrated work. In the earlier English theology and philosophy, as well as, of course, in those of his own country, the author is evidently at home, and even those who differ, as most occasionally will, from his interpretation of facts, will appreciate the moderate tone in which it is stated.

Contents of the Journals.

Archiv f. wiss. Erforschung d. Alten Test., Bd. ii. Hft. ii.—M. J. De Saulcy before the tribunal of truth and science, by T. Tobler.—Philonic studies, by C. Siegfried. [Seeks to show that Philo participated in a traditional knowledge of Hebrew.]—The 70 shepherds of the book of Enoch and their interpretations, with especial reference to the Barkochba hypothesis, by O. Gebhardt. [Concludes that the Ethiopic version is too inaccurate to be a safe guide in obscure passages.]—The Targum on Proverbs dependent on the Peshita, by Th. Nöldeke.—Job xxx. 11, by Ad. Merx.

Monatschrift für Gesch. u. Wiss. d. Judenthums.—Dr. Grätz has published a series of striking articles on the Scriptures subsequent to the return from the exile. Daniel is treated in the August, September, and October numbers, the canonicity of Esther in that for November, and the 119th Psalm—which is ascribed to Onias, founder of the temple at Leontopolis—in that for December.

Centralblatt, Dec. 16.—Merx's Job, rev. by E. S. [Rejects the author's principles of text-correction, but agrees with him in taking the half-verse as the metrical base.]—Kleinert on Deuteronomy, by the same.

Jahrbücher für deutsche Theologie, vol. xvi. No. 4.—See especially reviews of Scholten's *Aeltestes Evangelium*, Meyer on the Gospel of John, Krenkel's *Paulus*, by Weizsäcker, and of Martensen's *Christliche Ethik*, by Palmer.

New Publications.

BEGNI, G. *L' Ecclesiaste secondo il testo ebraico. Doppia traduzione con proemio e note.* Florence : Cellini. [Said to be the work of a good Orientalist, who is extensively acquainted with modern and even Protestant works on the subject.]

COLENZO, J. W. *The Pentateuch and Book of Joshua Critically Examined.* Part VI. Longmans.

FFOULKES, E. S. *The Athanasian Creed, By Whom Written and By Whom Published.* Hayes.

GRÄTZ, H. *Schir ha-Schirim, od. das Salomonische Hohelied.* Vienna : Braumüller.

ORIGENIS *Hexaplorum quae supersunt.* Concinnavit etc. F. Field. Tom. I. Fasc. 1. Clarendon Press.

RAUWENHOFF, L. W. E. *Geschiedenis van het Protestantisme.* Parts 1–3. Haarlem.

TESTAMENTUM Novum Graece [Tischendorf]. Ed. VIII. Fasc. 9. Leipzig : Giesecke und Devrient.

Physical Science.

Blood Crystals. [Blutkristalle. Von W. Preyer. Mit 3 gefärbten Tafeln.] Jena : Mauke.

THIS is one of those monographs, unfortunately too rare in our own country, which are so useful to those engaged in special enquiries, as giving in a continuous and condensed form all the more important facts and opinions up to the date of publication. It must not, however, be supposed that it is a mere literary compilation. On the contrary, it is the production of one who has himself contributed much to the subject by his own investigations, and contains a considerable amount of original material. Though the title of the work is *Blood Crystals*, it is, strictly speaking, an account of what is known respecting the physical and chemical characters of the red colouring matter of the blood (haemoglobin), and of various products derived from or closely connected with it. From whatever point of view we look on this substance, it must be regarded as one of the most important and remarkable presented to us for investigation. Though it may be obtained in perfectly well-defined crystals by methods described by the author, yet it has the characters, not of a crystalloid, but of a colloid substance, and will not diffuse through membranes. The chemical composition is also most remarkable. Besides the usual carbon, hydrogen, nitrogen, and oxygen, it contains iron and sulphur as essential constituents, and has the extraordinarily complex constitution expressed by the formula $C_{500}H_{800}N_{124}Fe_1S_2O_{178}$, the atomic weight being no less than 13332 ($H = 1$, $O = 16$). Such being the case, it is no wonder that the products of its decomposition already known should be very numerous, and that very much still remains to be learned. The optical characters of haemoglobin are remarkable, and very characteristic. As far as they are concerned, no difference can be detected between that met with in different animals. It is the same, not only in all the Vertebrata, but also in some Crustacea, Mollusca, and Annelida. It however appears to be satisfactorily proved that there is some essential difference even between the haemoglobin of different species of Mammalia. The crystals belong to two distinct systems (rhombic and hexagonal), and differ further in the secondary forms, and in solubility. Whether this depends on the haemoglobin itself or on the presence of some other substance, it is manifestly an extremely interesting question, not only in connection with physiology, but also in its practical application in the examination of blood-stains. The value of this test is however much impaired by the necessity of our examining fresh and unaltered blood; and the author concludes that it cannot be relied on as a means for distinguishing human from other blood; but at the same time the facts are so striking that perhaps it would be premature to abandon all hope of being able to make use of such a test in certain cases.

One of the most remarkable peculiarities of haemoglobin, and that which enables it to play such an important part in the animal economy, is the property it possesses of combining loosely with oxygen when exposed to the air, and readily giving it up to oxidizable substances. According to the author the constitution of the oxidized modification may be expressed by $O\{Hb$. These two atoms of oxygen can be removed by the air-pump, and the crystals of the deoxidized modification (Hb) are of the same form as that of the oxidized, but of a different colour, and give an entirely different spectrum. This loosely combined oxygen may also be replaced by other gases, according to a special law, not that of actual chemical substitution. Thus in the case of

carbonic oxide, CO replaces O₂, and not simply O. Other similar substitutions occur, the principal of which are given by the author in the following manner, though the constitution of some is so far somewhat hypothetical: NO,Hb ; CyH $\left.\begin{array}{l} O \\ \parallel \end{array}\right\} Hb$, which can be reduced by deoxidization to CyH,Hb ; S $\left.\begin{array}{l} O \\ \parallel \end{array}\right\} Hb$, which may in a similar manner be reduced to SHb. The compounds S $\left.\begin{array}{l} O \\ \parallel \end{array}\right\} Hb$ and H $\left.\begin{array}{l} S \\ \parallel \end{array}\right\} Hb$ are also very probable. This substitution of O with other gases in great measure explains their poisonous action. According to the author deoxidized haemoglobin can be restored to the oxidized modification by no other means than exposure to oxygen in a gaseous state.

The products of the decomposition of haemoglobin are very numerous, and present many facts of great interest. One of these is the only pure albuminous substance hitherto prepared. Though that is such a complex body, yet haemoglobin is so much more so that it splits up into coloured compounds, and this colourless albumen. When exposed dry to the air, blood or pure crystalline haemoglobin gives rise to a new substance of albuminous nature, for which the name *methæmoglobin* has been most generally adopted; and, since this compound is of great interest in connection with blood-stains that have been exposed for a while to the air, I have myself made it the object of very special study, and this leads me to differ from the author in certain particulars. He appears to me to have overlooked the changes produced in the spectrum by the presence of alkalis and acids. According to my experiments, when the solution contains as much of some weak acid as the methæmoglobin will bear without decomposition, the absorption-band in the red is so much increased in relative intensity that it may almost be said to exist alone. When nearly neutral, the spectrum shows four bands, as described by the author; but on adding excess of ammonia, two of these, which are nearly in the same position as those of oxidized haemoglobin, are made much darker, that in the red is removed, and an entirely new band developed in the orange, so as to give the author's spectrum, plate ii. fig. 8. This he describes as that of a product of the oxidation of oxidized haemoglobin, with which view I entirely agree; but that it is only the alkaline modification of methæmoglobin is proved by our being able to change it into the ordinary four-banded spectrum, backwards and forwards over and over again, just as we can restore the blue colour to litmus reddened by an acid. The nature of methæmoglobin is, in my opinion, well shown by the following experiment. To a solution of oxidized haemoglobin, giving the spectrum distinctly, carbonate of ammonia and a slight excess of ammonia are added, and then a very small quantity of a solution of permanganate of potash, until the spectrum is seen to have three much less dark absorption-bands of nearly equal intensity. On adding a little citric acid to neutralise all the free ammonia and cause slight effervescence, so that the solution may contain free carbonic acid, but no free citric, the four-banded spectrum may be recognised, and then the addition of a very minute quantity of the double sulphate of protoxide of iron and ammonia gradually changes this directly into the original spectrum of oxidized haemoglobin, without the intermediate production of the deoxidized modification. I therefore contend that methæmoglobin is derived from oxidized haemoglobin by the introduction of a small quantity of oxygen, in such a manner that it may be removed by deoxidizing reagents, and the haemoglobin restored to its original state.

The chief coloured products of the decomposition of haemoglobin described in detail by the author are haemin,

haematoin, and haematin. He also notices more briefly some less understood colouring matters met with in living animals, which may perhaps be derived from the colouring matter of the blood, and various artificial products obtained by Hoppe-Seyler. The number of products that could be obtained from such a complex substance is no doubt great, and I could myself add five or six which give entirely different and well-marked spectra.

Haematin contains no albuminous substance, is free from sulphur, but contains iron as an essential ingredient. According to Hoppe-Seyler its composition is $C_{68}H_{70}N_8Fe_2O_{10}$. Haemin contains chlorine as well as iron, and its composition is $C_{68}H_{72}N_8Fe_2Cl_2O_{10}$. Haematoin is free from iron, and its composition $C_{68}H_{74}N_8O_{12}$, being thus haematin — $Fe_2 + 2$ aq.

According to the author, what has hitherto been considered to be the spectrum characteristic of acid haematin is really that of haematoin. He contends that when a free acid is in the solution the haematin is deprived of its combined iron, and is changed for the time into haematoin, but that on adding an alkali the iron re-combines, and haematin is reproduced. What he thus names haematoin, he thinks is probably identical with the iron-free haematin formed by the action of concentrated sulphuric acid on haemoglobin, &c. (Thudichum's *cruentine*). These views are very simple and ingenious, but I must confess that my experiments lead me to believe that there are really several distinct substances, and that the facts are much more complex—at all events too complex to be described now.

The chapter on the detection of blood by the spectrum method is, in my opinion, not on a level with our present knowledge, but fully confirms the views of those who argue that no other known substance gives the same spectra as those of blood. The methods described by the author would enable an experimenter to recognise a moderately small quantity of fresh blood on an inert fabric, but they would probably fail if the stain had been exposed for a few days to the impure air of a large town, and certainly if the quantity were very minute, if particular mordants had been used in dyeing the fabric, or if it had been soiled by dirt or perspiration, and still more so if it were on leather and had been partially removed by water.

In the last chapter the author discusses certain points connected with the physiological action of the red colouring of the blood. He shows that nearly all the oxygen of the blood which is available for oxidizing purposes is that loosely combined with the haemoglobin, and argues that the difference between the arterial and venous blood in the foetus proves that oxygen may pass from the red globules through the membranes of the capillaries; in this case, of course, through those of the placenta. He also shows that almost the whole of the iron in the blood is that contained as an essential constituent in the haemoglobin. In conclusion, the work contains a list of about two hundred memoirs connected with the subject, with full and complete references.

Though I have thus somewhat freely criticised certain portions, yet I must express my great admiration of the work as a whole, and recommend it strongly to the attention of those interested in such an important subject as physiological chemistry.

H. C. SORBY.

Scientific Notes.

Physiology.

The Tone of the Voluntary Muscles.—Georg Heidenhain contributes an essay (*Pflüger's Archiv für die gesammte Physiologie*, Band iv. Heft. x.) on the influence of the posterior roots of the spinal cord on the excitability of the anterior. These experiments deal essentially with the nature and cause of the tone of the voluntary muscles. Harless

conceived that the stimulus to maintain this tone was constantly being transmitted by the sensory fibres of the muscle in a direction contrary to that in which they ordinarily convey impressions; whilst Cyon maintained that the motor nerves were constantly being excited by peripheric irritations, which stimulated the sensory nerves, and were conducted by them in the ordinary mode through the posterior to the anterior roots. Heidenhain is opposed to both views, and believes that no influence of the kind is exerted. The tone of the muscles, it would appear from Schwalbe's and Heidenhain's experiments, is simply their natural condition of healthy nutrition, independent of the nervous supply; for if, as the former has shown, the sciatic of a frog be so suddenly utterly destroyed that no convolution of the gastrocnemius occurs, it will be found that this muscle does not undergo the slightest elongation.

Tension of the Gases of the Blood of the Capillaries.—Siegfried Wolffberg (in the same part of *Pflüger's Archiv*) discusses the tension of the gases of the blood in the capillaries of the lungs, gives the results of many experiments, and arrives at the following conclusions:—
(a) The tension of the oxygen of the blood entering the capillaries of the lungs amounts on the average to 27 millimetres of mercury. (b) The tension of the carbonic acid in the capillaries of the lungs is on the average equal to 24 millimetres of mercury. (c) The expired air contains on the average 2·8 per cent. carbonic acid and 16·6 oxygen. (d) The tension of the carbonic acid of the blood of the pulmonary artery is equivalent to an atmosphere containing from 3·6 to 5·1 per cent. of carbonic acid.

The Metamorphosis of Tissue.—Dr. Paalzow has a paper in the same Part on the influence of irritation of the skin on metamorphosis of tissue. He shows that when tracheotomized rabbits were immersed in water charged with carbonic acid, and kept at an even temperature, no increase in the amount of carbonic acid expired occurred; but when mustard was added, there was a considerable increase in the amount of oxygen inspired, and of carbonic acid expired, showing augmented metamorphosis of tissue.

***Pflüger's Archiv*, Band iv. Heft x.** Moreover, Gustav Strassburg describes the action of acids on the oxygen of the haemoglobin of the blood, and shows that their action is to diminish the quantity of oxygen with which it is combined. The same author gives a modification of Pettenkofer's test for the detection of the biliary acids in the urine, by means of which he can detect 3-1000ths of a grain. It consists in dipping a piece of filtering paper in the urine, to which cane sugar has been previously added, drying it, and then dropping some concentrated sulphuric acid upon it. A beautiful violet tint appears.

Prof. A. Heynsius and Dr. J. F. F. Campbell communicate at considerable length their researches on the products of the oxidation of the biliary colouring matters, and their absorption bands when examined with the spectroscope. In an introductory chapter they give a very complete résumé of Städeler's and Jaffé's observations, as well as the more recent ones of Maly, Thudichum, Bogomoloff, and others.

***Pflüger's Archiv*, Band iv. Heft xii.** contains only three papers, the last of which however is of considerable length. In the first, Heidenhain endeavours to refute the theory recently advanced by Cyon in regard to the centric origin of the vascular nerves. In the second, the same author, Heidenhain, gives the details of his experiments on the much discussed question of the relative temperature of the right and left sides of the heart. He agrees with Bernard and G. Liebig that there is always or almost always a difference between the two; the right being 0°·1 to 0°·3 or in extreme cases as much as 0°·6 Cent. higher than the left. The last paper is by M. Eichhorst on the absorption of albuminates in the large intestine. The essay is a valuable one; and the author gives the results of his observations as follows. The Succus entericus both of the large and small intestine is destitute of any peptic ferment. It has no action even on fibrin. The Succus entericus of the small intestine contains a diastatic ferment; but this is absent in the secretion of the large intestine. This last has no other function than that of lubricating the lower part of the bowels. The secretion of the small intestine can prevent solutions of gelatine from solidifying; this he thinks is due to the action of a special ferment. When introduced into the large intestine, the following substances are capable of being absorbed: a-b-c peptones, pieces of meat, albuminous substances of milk, dissolved myosin and Lieberkühnian alkali-albuminate, ordinary albumen of egg mingled with salt, solution of gelatine, and Liebig's extract of meat. On the other hand, pure ovalbumen, solution of syntonin, ser-albumen, undissolved fibrin, syntonin, and myosin are not absorbed.

***Pflüger's Archiv*, Band v. Heft i.** contains eight papers:—1. The action of the constant current on the pneumogastric nerve, by F. C. Donders. Chiefly dealing with the electrotonic conditions of the vagus established by currents of various strength. 2. The chemistry of respiration, a dissociation-process; by the same author. 3. The white corpuscles of the blood, and the alterations they undergo from the action of quinine; by G. Kerner; who shows that they are rendered motionless, round, and darkly granulated by this agent. 4. Movements in nerve fibres on excitation, with intermittent electrical currents. In this paper Dr. Th. Engelmann calls attention to certain contractions indi-

cated by wrinkles of the sheath of the nerve, but not accompanied by shortening of its length, if a fibre be removed from an animal and submitted to the action of induction shocks whilst lying in a weak solution of common salt. The current passing on breaking the connection is the most effective. No wrinkles are visible in naked axis cylinders. He attributes the changes observed to the thermic action of the current, and to consequent changes in the succulence (Quellungszustand) of the sheath. 5. Fick gives the results of a series of experiments he has made during the past summer on the effects of heating and cooling the blood passing to the vasomotor and cardiac nerve centres, and states that to his great surprise he has obtained only negative results, though when such changes were produced in the blood passing to the respiratory centres, very marked effects were observed. 6. The next essay, by the last-named author, is on the function of the peptones in the blood. He regards them as compounds capable of easy disintegration, and as supplying by their non-nitrogenous portions the combustible materials for the muscles and other organs, their nitrogenous constituents being speedily eliminated from the body. 7. Friedrich Schultze gives the results of his analysis of the air contained in the swimming bladder of carp and tench. The smallest amount of oxygen was 1·1 per cent., of carbonic acid 1·4 per cent.; the highest of oxygen 13·2, of carbonic acid 5·4: the rest being nitrogen. 8. The last essay is one by Fr. Goltz, showing that the nerve centres have a direct and immediate influence on the process of absorption.

Geology.

The Fossil Plants of the Devonian and Upper Silurian Formations of Canada.—It has been pointed out by Hall and Dana that during the earlier part of the Upper Silurian period North America was covered by a great internal ocean, partially separated from the Atlantic by a belt of sandbanks or islands, representing the older portions of the Appalachian range, and bounded on the north by Laurentian and in part by Lower Silurian deposits. At the close of the Upper Silurian the area of land in North Eastern America was at a minimum. At the beginning of the Devonian a slow and gradual emergence, unaccompanied by any faults or other physical disturbances, appears to have commenced. Contemporaneously with the very beginning of these changes appeared the Erian (by which is meant the Devonian peculiar to Canada) or Devonian flora. Already, before the close of the Upper Silurian, the first patches of emerging land must have become clothed with *Psilophyton*, and by the time of the Middle Devonian the flora had, at least on the Atlantic coast, culminated. At the time when the Erian or Devonian flora attained to its greatest extension, there must have been in Canada a considerable extent of Laurentian and Lower Silurian land; and the Erian flora appears to have enjoyed climatic and atmospheric conditions similar to those of the Carboniferous period, but with a smaller continental area and greater proportionate irregularity of surface. At the close of the Devonian period great physical disturbances occurred in the regions lying east of the Appalachians. In the west these disturbances were delayed till after the Carboniferous period had begun, but even in the west the Devonian flora disappears at the beginning of the Carboniferous period. Generically the flora of the Erian is in the main identical with that of the Carboniferous, and the most important and characteristic Carboniferous genera are also among those best represented in the older flora. On the other hand, while some Carboniferous genera have not yet been recognised in the Devonian, the latter possesses some peculiar generic forms of its own, which are especially abundant in the lower part of the system. As examples of such genera may be named *Psilophyton*, *Prototaxites*, *Leptophleum*, and *Arthrostigma*. Perhaps the most remarkable of all the generic differences of the Carboniferous and Erian flora is the occurrence in the latter of the exogenous genus *Syringoxylon*, a type otherwise altogether unknown in the Palaeozoic age. As regards its species the Devonian flora is almost altogether distinct from the Carboniferous. A comparison of the fossil plants of the Devonian rocks of Canada and of Europe is very difficult, since the Devonian formation is limited in Europe to so small an area. It is known that during the Carboniferous epoch the Appalachian range constituted a more important physical barrier than the Atlantic, and that the flora of the Atlantic slope of America was much more closely allied to that of Europe than that of the great internal plain of the American continent. The genus *Psilophyton* of the Erian of Canada was not found in Europe until 1870, when Dr. T. W. Dawson visited England and recognised (*Rep. Geol. Survey of Canada*, 1871) in several specimens of Devonian rocks from Germany and England the American *Psilophyton*. On comparing the Erian with other floras, the author concludes that no plants other than Lycopodiaceæ or allied forms have been detected below the Lower Devonian. Should it prove certain that Acrogens plants allied to Lycopodiaceæ, and perhaps such prototypes of Gymnosperms as *Eophyton*, extended back to the Primordial period, we might look for the actual origin of land vegetation in the Laurentian. These views respecting a primitive Silurian and Laurentian flora are strengthened by the fact that the plants of the Lower and Middle Devonian

have the aspect of the remains of a decaying flora verging on extinction, while those of the Upper Devonian give us a great number of new forms allied to those of the Carboniferous.

Congeria Beds in the Rhone Valley.—C. Mayer discovered a short time ago (*Verhandl. der k. k. geol. Reichsanstalt, Vienna*, No. 15, 1871) beds of yellowish and grey sandy marl near the town of Bollène in the Département de la Drôme, which yielded, besides four species of Congeria, four Cardiae, a Melanopsis, and the two Neritinae, *N. picta* and *N. Grateloupi*. The deposit, which consists almost entirely of these shells, resembles more the character of the Crimean Cardiae beds than the typical Congeria beds of Austria and Hungary. The beds rest on a coarse marly sandstone, which may be the marine equivalent of the Cerithium beds of Eastern Europe and the Limnæus beds of Switzerland.

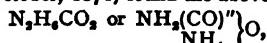
Cetotherium Remains in Southern Russia.—These occur here in three horizons (Th. Fuchs, *ibid.*). *C. Raikhei* is found in a compact yellowish-grey limestone, with casts of *Ervillea podolica* (Sarmatian beds). The dolomites of Stavropol are embedded in a loose porous limestone of oolitic character, together with Foraminifera, doubtful casts of a small *Cardium* (*C. obsoletum*), and other fossils. The Foraminifera are the same as those found in the uppermost beds of the Sarmatian deposits, below the Congeria beds in the Vienna basin. Other Cetotherium species come from a yellow ferruginous sand of the vicinity of the fortress of Anapa, associated with *Cardium carassatum*, Desh., *C. edentulatum*, Desh., and *Mytilus* (*Congeria rostriformis*, Desh.), thus resembling the Cardiae beds of the Crimea. The occurrence of marine Mammalia, not only in the older Sarmatian beds, but also in the brackish Congeria strata, is of the highest importance, as it confirms the views, long held, that the Congeria beds of Europe assume marine characters, the farther east we travel.

Chemistry.

The Diamonds found in Xanthophyllite.—It was announced in the *Academy* for 1st July, 1871, that v. Jeremejew had met with minute crystals of diamond in great abundance in a microscopic examination of the above-named rock. He recognised their forms, hexakis tetrahedra, with somewhat rounded faces. G. Rose (*Ber. Deut. Gesell. zu Berlin*, No. 17, 1871, 903) now states that v. Helmersen has succeeded, by treating the xanthophyllite with acids, in isolating the diamonds in the form of a fine powder, which burnt away, leaving no residue, and abraded and rendered dull the smooth and brilliant faces of the hardest minerals, such as corundum. The greenish grey, less transparent varieties of xanthophyllite contain the diamonds in greater abundance than the yellow transparent plates of this rock.

Ilsenmannite.—In the *Jahrbuch für Mineralogie*, 1871, 566, H. Höfer gives this name to a new mineral occurring in some heavy spar from Bleiberg. Between the crystals of this mineral occurs a bluish-black or black cryptocrystalline mass, which becomes more blue by exposure to the air, is soluble in water, and proves to be molybdate of oxide of molybdenum. On boiling a specimen with water, a dark greenish-blue solution is found, which after the lapse of some hours becomes deep blue, resembling the colour of a solution of sulphate of copper and ammonia. By the evaporation of this liquid and the separation of a quantity of gypsum which is present, a salt is finally obtained which dissolves in water with a magnificent dark blue colour. Ilsenmannite appears to be the $\text{MoO}_2 + 4\text{MoO}_3$ of Berzelius, and it is supposed to be a product of the decomposition of wulfenite.

Dissociation of Ammonium Carbamate.—In conducting an experimental enquiry into the phenomena of dissociation, A. Naumann (*Ann. der Chemie*, October, 1871) found the above salt,



adapted to the purposes of this research through the ease with which it is rendered gaseous, and the absence of all corrosive action of the products of its decomposition—carbonic acid and ammonia—on the mercury made use of for the apparatus. He noticed that ammonium carbamate is not volatile without decomposition, being split up, on its taking the gaseous form, into carbonic acid and ammonia. In the case of the products of the decomposition of this body there exists a dissociation tension (usually only attained after some time has elapsed, and greatly delayed under certain circumstances) constant for each temperature as tension of equilibrium where, however varied the conditions may otherwise be, in the same time exactly as many molecules of ammonium carbamate are decomposed as are reproduced from the products of decomposition. The curve of this tension from ammonium carbamate is continuous: as the temperature rises, the increments of tension for equal increase of temperature becoming augmented, as in the tension curves of vapours of solid and liquid bodies. The dissociation and reproduction of ammonium carbamate takes place but slowly, the tension of equilibrium of any given temperature being arrived at only after the lapse of hours or even days, according to the relation borne by the surface of the solid ammonium carbamate to the capacity of the vacuum. The velocities of

dissociation and reproduction diminish the more nearly the actual tension approaches the tension of equilibrium. The velocities of dissociation, under otherwise similar conditions, in which are to be included equal removal from the tension of equilibrium, appear to be greater at higher temperatures than at lower. An explanation of the lengthened times of dissociation and of reproduction of ammonium carbamate may perhaps be to some extent sought in the necessary rearrangement of the atoms during decomposition and reproduction, not however in the solid state of aggregation of the body as such, for the duration of evaporation and condensation of solid bodies is but brief.

The Meteorites of the Mexican Desert.—With the object of fixing with greater precision the geographical position of the meteoric masses that have been from time to time met with on the Bolson de Mapini, Dr. J. Lawrence Smith has communicated a paper to the *Am. Jour. Science*, for November, 1871, 335. There were already known the Cohahuila meteorite of 1854 (1), the Cohahuila meteorite of 1868 (2), the Chihuahua iron of 1854 (3), still at the *Hacienda de Concepcion*, and weighing about 4000 pounds, and the Tucson iron (4), found in 1854 on the north of the Rio Grande, and having the form of a ring; this mass weighs from two to three thousand pounds. A fifth mass (5) has since been heard of on the western border of the Mexican Desert, that has received the name of the *San Gregorio meteoric iron*. It measures 6 feet 6 inches in length, is 5 feet 6 inches high, and 4 feet thick at the base; on one part of its surface 1821 has been cut with a chisel. Its weight is calculated to be about five tons. An examination of a fragment showed it to be one of the softer meteoric irons; it has a specific gravity of 7.84, and consists of 95 per cent. of iron and 5 per cent. of nickel, inclusive of a little cobalt. Still more recently news has arrived of the discovery, in the central portion of the desert, of a huge meteorite (6) larger than any yet found in this locality. Dr. Lawrence Smith's paper is illustrated with a little map indicating their relative positions. He believes they are the result of two falls. The Tucson iron has characters that distinguish it from the remaining five. The latter, he considers, fell at an epoch probably far remote, moving from northwest to southwest during their descent: 1 and 2 fell first, 85 miles apart. The distances between the larger masses are,—from 2 to 6, 135 miles; from 6 to 5, 165 miles; and from 5 to 3, about 90 miles.

The Separation of Magnesia from the Alkalies.—After an examination of the numerous methods for effecting the separation of these bodies for the purposes of quantitative analysis, T. Scheerer recommends the following process (*Jour. prakt. Chem.*, 1871, No. 10, 476). The liquid containing the chlorides which may contain ammonia salts is to be evaporated nearly to dryness in a platinum dish, then treated with an excess of powdered ammonium oxalate, thoroughly dried and gently ignited. Care is to be taken that the whole of the contents of the vessel is exposed to the high temperature. On boiling the mass with water and passing it through a filter, the magnesia is collected on the paper as insoluble magnesium carbonate, and the potassium and sodium carbonates are to be found in the filtrate. Ammonium oxalate is only converted into ammonium carbonate at a temperature higher than that at which the latter salt volatilises. If therefore ammonium carbonate be employed in the place of ammonium oxalate, the separation does not take place.

Preparation of Absolute Alcohol.—Of the many substances that have been used to remove the last traces of water from alcohol, such as potassium carbonate, anhydrous copper sulphate, anhydrous potassium ferrocyanide, caustic lime, caustic baryta, &c., Mendelejeff, after many trials, gave the preference to lime. He states that after drying alcohol of 0.792 specific gravity with an excess of burnt lime for two days, an anhydrous product is obtained. Erlenmeyer (*Ann. der Chem.*, November, 1871, 250), who finds however that those portions of the distillate only which pass over when the operation is advanced halfway are actually free from water, suggests the following modification. He keeps the alcohol in contact with the lime for about half an hour or an hour in the water-bath at the boiling temperature, providing the vessel with a cooling tube that shall carry all the condensed spirit back into the flask. In this way the whole of the distillate is anhydrous. If the alcohol contain more than 5 per cent. of water two or more treatments are necessary.

New Books.

- BURMEISTER, L. *Theorie und Darstellung der Beleuchtung gesetzmässig gestalt. Flächen.* Leipzig : Teubner.
 BROCA, P. *Mémoires d'anthropologie.* Vol. I. Corbeil et Paris.
 CLEBSCH, A. *Theorie der binären algebraischen Formen.* Leipzig : Teubner, 1872.
 DUMAS, E. *Notes sur la fabrication des monnaies d'or et d'argent en l'Angleterre.* Paris.
 GRISEBACH, A. *Die Vegetation der Erde nach ihrer klimatischen Anordnung.* 2 Bde. Leipzig : Engelmann.

- KEPLERI, Joannis, *Opera omnia.* Edited by C. Frisch. Vol. VIII. Parts II. Frankfurt a. M. : Heyder and Zimmer.
 KRAUT, K. *Gmelin-Kraut's Handbuch der Chemie.* 3^{te} Band, 3^{te} und 4^{te} Lieferungen. Heidelberg : Winter.
 MESTORE, J. *Der archäologische Congress in Bologna.* Aufzeichnungen. Hamburg : O. Meissner.
 SANDBERGER, F. *Die Land und Süßwasser-Conchylien der Vorwelt.* 4^{te} und 5^{te} Lieferungen. Wiesbaden : Krieger.
 SCROPE, G. P. *Volcanoes.* Second edition, revised and enlarged. Longmans.
 SPINOZA's sämtliche philosophische Werke, übersetzt von J. H. von Kirchmann u. Schaarschmidt. 8. u. 9. Hft. Berlin : Heimann.

Philology.

THE PRONUNCIATION OF LATIN.*

VII.

AFTER the Latin pronunciation controversy had slept for six months, it was not without a qualm that I saw it once more reopened in the last number of the *Academy*, and by no less an authority than Prof. Max Müller. It was with real satisfaction, therefore, that I found he has now given his sanction, practical as well as theoretical, to the uniform hard sounding of *c*. As, however, with regard to the much-vaed consonant *u*, which occupies by far the larger part of his article, he is good enough to say that he now leaves the decision with my Oxford colleague and myself, I feel it due to him to show as briefly as I can why I do not acquiesce in his arguments for a *v* sound, but still advocate one much nearer our *w*.

He begins by saying that "the general result of the discussion seems to be that in Latin *v*, as a consonant, must have been as close to the vowel *u* as a consonant can be. So far all parties are agreed." The *w* advocates certainly : but are all parties agreed? He himself admits afterwards that, if a language possesses both the labial and dento-labial *v*, the former would be the nearest approach. An unsophisticated Italian tongue seems incapable of pronouncing the English, or the South-German *w*, or the French *ou* of *oui* or *ouais*; but Italian ears seem now to be, and for more than twelve centuries to have been, most susceptible to the difference in sound between these and their own *v*, finding *gu* to be a much nearer approximation. Whereas the ancient Romans appear without the least misgiving to have in all cases reproduced the German *w* by their own consonant *u*. Why should we suppose their ears less acute than those of their modern descendants? and why, if their *v* was sounded exactly like the modern Romance *v*, could not the old Romans have used some combination of *g* and vowel *u* to express the old German *w*? For, assuming the Latin *v* to have closely resembled the ancient German *w*, it is surely a most striking coincidence that, as Mr. Rhys has shown, the ancient Welsh, having no initial *w*, would appear to have heard in the old Roman *vallum* and *vagina* something very like *gwallum* and *gwagina*.

Such considerations seem to me to go far towards supporting the "hypothesis that, at some time or other, but certainly before the Romans came into permanent contact with their Teutonic neighbours, they changed their old pronunciation of the *v* from the labial to the dento-labial." Now, so far as I can gather, one of Mr. M. Müller's two main arguments for the dento-labial is that such an hypothesis, though not impossible, is extremely artificial. But are not such hypotheses forced upon us by the phenomena of most

* We are compelled to postpone to our next an important and elaborate paper of Mr. Alexander J. Ellis on the same subject.—ED.

languages with whose history we are acquainted? Unless I quite misapprehend what he tells us of Sanskrit, he deems it most probable, or at least not improbable, that exactly the same thing has happened with its labial breathing; that, once a labial, it has become a dento-labial. A very similar phenomenon, too, is the modern Greek *av* and *af*, *ev* and *ef* pronunciation of the old diphthongs *aw* and *ew*.

But it is better to appeal for support to Latin itself: here again, as in so many other respects, the fortunes of *u* would seem to be closely linked with those of its brother, consonant *i*. All of us, I believe, are agreed as to *its* Latin sound; and in the Romance languages it has undergone changes parallel to those of *w* to *v*, though its nature has allowed of a somewhat greater variety, as seen in English *j* or Italian *gi* and *ge*, French *j*, the Spanish aspirate, &c. Nay, even in Greek words, when initial *i* had acquired a consonantal *y* sound, Romance-speaking people have found it necessary to change it, too, systematically, and we have *Jésus*, *Jean*, *Jérôme*, *Gesù*, *Giovanni*, *Girolamo*. Does not the insertion too of this *v* in *Giovanni*, *Genova*, and the vulgar *Pavolo* for *Paolo*, and the like, tell a tale of its own in support of our hypothesis?

His second chief argument he thus states in his last paragraph:—"I cannot help thinking that there is one phonetic peculiarity in certain Latin words which can only be explained if we assign to *v* a dental or dento-labial character. The Latin *in* is changed into *im* if followed by labials. . . . *F* we know was dento-labial in Latin, and therefore we have *infirmus*. The same with *v*, *invictus*. *Com* in Latin is changed to *con* before gutturals and dentals; it remains *com* before labials. . . . Why was it *conviva* like *confido*, but not *comviva* like *combibo*, unless, like *f*, *v* in Latin was pronounced not with the lips alone, but with lips and teeth?" Let me state briefly why this argument too carries with it no conviction to my mind.

It is true that in the best ages *in* often, not always, became *im* before *b*, *p*, and *m*; that *com* generally, by no means always, remained unchanged before these letters; that before consonant *u* *com* generally, not always, became *con*: not always, I say; for in one of the most precious of Latin inscriptions, the letter of the consuls about the Bacchanalia, written B.C. 186 (*C. I. L.* i. 196), we read in l. 13: "neve . . . coniourase neve comovise neve consondise neve compromiese:" here we have *m* before consonant *u*, *n* before *p*; and in the best times *combibo*, *compleo*, *commiuo* might always be used. But I can admit of no analogy whatever in classical times between *f* and consonant *u*: there was an absolute incompatibility between *f* on the one hand and either *ph* (*φ*) or consonant *u* on the other; and the fact that Latin *f* and *ph* finally coalesced in the Romance *f* is proof of a change as great and systematic as that of *w* to *v*.

But we know from many quarters, from Cicero and Quintilian, that there was a strong affinity between *s* and *f*; and I have always believed that the same phonetic laws which constrained the Latins to say *conspiro* compelled them also to say *confido*. If, then, we are to seek for some such analogy, since it is allowed on all hands that there was a strong affinity between the guttural *g* and consonant *u*, I should be disposed to believe that they preferred *conviva* to *comviva*, because they always said *congro*, *concurro*, not because they said *conduro*, *conturo*.

But here, too, I would much rather appeal to that never-failing analogy between *u* and *i*. They were semi-vowels, and their vowel nature was ever present to the minds of the ancients. *In* was always unchanged before all vowels alike; it was also unchanged before consonants *u* and *i*. *Com* and *con* were perplexing: at first they would seem to have acquiesced in *com*, as in the archaic *comovise* and *comalem*, perhaps for the same reasons that we find *comes*,

comedo, *comitia*. Next, in the case of both *u* and *i* we find *co*, as is usual before vowels: *coventionid* (= *contione*), *covenimus*, and *cocire*, *coinci*. Finally, they seem to have acquiesced in *con* before consonant *u* and *i* alike.

Doubtless all advocates of *w* will be "quite willing to admit that they only stand up for a pure labial breathing, not for the exact English *w*." Let it be English, or South German *w*, or the French *ou* of *oui*; only not English or Romance *v*. The English *w*, as phonologists say, may be peculiar to the English; but when Mr. Max Müller observes, "though I have lived in England for a quarter of a century, I still am unable, as the best phonologists tell me, to pronounce the pure English *w*," he will not have forgotten that a few weeks ago the untutored ears of half a dozen of the best philologists in Oxford were unable to perceive the slightest difference between his English *w* and their own. Gladly, then, will I, for one, accept as a compromise his version of English *w* for the sound of consonant *u*.

H. A. J. MUNRO.

An-Nadim's Index of Arabic Literature. [*Kitâb al-Fihrist*, mit Anmerkungen herausgeg. von Gustav Flügel. Nach dessen Tode besorgt von Joh. Roediger und Aug. Müller. Zwei Bände.] Mit Unterstützung der Deutschen Morgenl. Gesellschaft. Erster Band: den Text enthaltend.] Leipzig: Vogel.

A WORK of the greatest importance for literary history appeared towards the end of the tenth century A.D. under the modest title *al-Fihrist* or *The Index*. It was from the pen of *Ibn Abî Ya'kûb an-Nadîm*, and consisted mainly of a bibliographical description of Arabic literature with short biographical notices. The first four centuries of the Hijra were much more fruitful in most departments of this literature than those which followed, and the works produced had a proportionate degree of importance. Our author, living in the centre of the literary movement, unrolls to us, chiefly by a simple enumeration of the titles of books, the picture of an activity on a large scale. It is enough to refer to the comprehensive works of Arabic philologists (using the word in its largest sense), on which this work gives us accurate information. And we infer from an-Nadim that the activity of Arabic *savants* was not less marked in other departments. The works of this period which are still preserved form but a small part of what was once extant, and a melancholy feeling often comes over us in reading this book, as if we were walking over a field of ruins. It is true that many, or rather most, of the works enumerated in the *Fihrist* can hardly be regretted. What better lot could befall most of the innumerable poems of those centuries than that their loss should make it impossible for us fully to estimate their worthlessness! And then we must remember that but few persons in the East have themselves thought and observed, and that by far the greater number of Arabic works are compilations and epitomes; this was already the case in the time of an-Nadim, and the very want of originality on the part of later authors was the means of preserving the principal contents of lost works. And yet, in spite of this, there were sources of valuable information without number among the books which an-Nadim still had before him, and which are now lost. This is especially true of the historical works. Many of the works, for instance, of *Ibn-al-Kalbî*, uncritical as he may have been, would have possessed the greatest value for us; I need only mention his book on *Hira*, its Christian inhabitants, and their churches and convents (p. 97, l. 12 sq.). And thus at every step we find in the *Fihrist* the titles of works which we cannot but deeply regret to have lost.

I have already indicated that an-Nadim is not so much a historian of literature, strictly speaking, as a bibliographer.

This appears particularly in his treatment of the poets. He mentions the philologists who collected the works of the several ancient poets, or groups of poets, and states the extent of the works of later poets, but leaves us in utter ignorance of their respective peculiarities; to describe these did not enter into his plan.

It is one great merit of the author that he does not confine himself to scientific and elegant works, but refers as much as possible to the popular literature as well. We get a glimpse of stories like the *Thousand and One Nights* (a work which he confesses that he fails to relish, p. 304), and of a strange medley of magic, jugglery, erotica, &c.

Besides the proper Arabic literature an-Nadim takes note of everything which was translated into Arabic. We thus obtain some very valuable notices as to the earlier Persian literature, and even on Indian works, though the deformation of the titles and names of the authors makes the latter very enigmatical. He dilates particularly on the works translated from the Greek, and though his notices on Greek philosophers and others will scarcely yield any fresh information on the writers themselves, they may at least illustrate the propagation of literary legends and traditions. At any rate a careful monograph on the chapters containing them cannot fail to be of use to the classical philologist. Among the translated works we find very valuable by the side of utterly worthless matter—e.g. by the side of Aristotle and Plato the work "On Rivers," which is represented as proceeding from "another Plutarch" (p. 254, l. 17 sq.). The author is careful to give the names and the method of procedure of the several translators. On one occasion he mentions from his own knowledge that some chests were found in Ispâhân, containing papers which were declared by experts in Baghdad to be Greek army-lists (p. 241). These seem to have belonged to the time of the Seleucidæ.

As a copyist by profession, an-Nadim takes great interest in all kinds of writing. Thus he opens his work with a very interesting section on the language and writing of various nations. What he there says of the various kinds of Arabic writing would be much more important if a larger number of good specimens of them were extant. The negligence of the copyists has pretty well deprived us of the benefit we must have derived from transcription of foreign alphabets. When we are already acquainted with an alphabet, e.g. the Hebrew (p. 15), we can still detect the several letters under their distorted forms, but only in such cases. Hence I have unluckily failed in unriddling the Manichæan alphabet, in which we doubtless have to seek one of the many varieties of the Aramaic writing. I do not even venture to assert positively that the apparent similarity of the six letters on the lowest line (Sâd, Mîm, Hâ, Kêf, Qâf, Hê, the Arabic names of which are written out at length between the letters) to the corresponding Mandæan ones is reliable. But there is much important matter on other subjects in these chapters; see, for example, the passages on the so-called Huzwaresh (*Zuwârîshn*, p. 14, l. 13), and on the varieties of Syrian writing, where the first mention known to me of the name *Estranglâ* occurs (p. 12, l. 12). Several of an-Nadim's statements on the Aramaic language are given on the authority of "the commentator" Theodore (of Mopsuestia) (pp. 12, 14), so that he must have derived this information from Nestorian sources. In fact, most of the Syrians who had intercourse with learned men in Baghdad seem to have been Nestorians. Thus, too, the canon of the Scriptures in the *Fihrist* (p. 23 sq.) is the Nestorian, though it is true that the titles of some books have fallen out of the list by mistake. An-Nadim had also literary relations with the Jews. From this source he gives us a catalogue of the works of Sa'dia (p. 23).

The cultivated Arab world was at that time tolerably free

from fanaticism; and the theological liberality of our author is proved by his whole work, but especially by his excellent notices on the various religious parties, which, strictly speaking, do not fit into the *cadre* of the work, though perhaps they form its most valuable part. Not only does the book supply accurate information on semi-pagan sects like the Ismaelites, &c. (which nevertheless stand in a rather close relation with Mohammedanism), but also on such as stand in direct opposition to the weightiest principles of Islam. The most valuable of these notices, viz. on the heathen in Harrân, and on the Manichæans, had already been published from the *Fihrist*, the former by Chwolsohn, the latter by Flügel. Besides this, we learn from the *Fihrist* that there still existed a number of Gnostic sects, the mere remnants of widely spread religious parties, and doubtless already much altered from their original form. The only sect which has survived to this day are the Mandæans.

The *Fihrist* is better arranged than is usual with Arabic writers, and even though there is much in the division of the matter which may surprise us, it is not at all impossible to find one's way to some extent in the book. But the use of this so-called Index, composed, as it is, of groups of subjects, will be greatly facilitated by the expected alphabetical index.

An-Nadim goes very carefully to work. He is in the habit of naming his authorities, but prefers, wherever he can, to derive his *data* from ocular evidence. Being a learned copyist and bookseller, he gained access to many works in all kinds of literature, besides which he was a lover of literary curiosities. He draws a vivid picture (p. 40 sq.) of an old collector of books and autographs, who once allowed him to inspect his treasures, which at other times he guarded as jealously as a miser, and which were destroyed after his death, no doubt in accordance with his wishes. It is interesting to know that the collector was afraid of the Hamdâniids. That princely house was well known for its attachment to literature, and might not be disinclined to add such rarities to their own collection.

An-Nadim's style is enough to show that he was not a professional scholar. It is certainly surprising that one so well acquainted with literature should commit so many offences against Arabic grammar. For example, he uses *stiyamâ* without *âl*, and even says *awwâlah*, "prima," for *âlâ*. The editors have, therefore, done wisely in not correcting the numerous grammatical errors, even though there can be no doubt that their number has been increased by the copyists. Besides, these errors are more owing to a certain negligence than to ignorance, for the author shows in some places that he is able to form an opinion on purity and impurity of style.

According to his own statement several times repeated, the *Fihrist* was written in the year 377 of the Hijra (beginning May 3, A.D. 987). The collection of materials must naturally go back into a much earlier time. The MSS. however present many vacant spaces, the greater part of which are due to the author himself, who was desirous of filling these up gradually by inserting the number of the year, &c., but could not carry this into effect. We may therefore readily admit to Flügel that the author worked at his book from time to time even after that date. But it is equally clear that at least a few additions have been made by another hand. Cases like that in p. 146, l. 4, "it comes on the next leaf, the author has ordered it to be so," speak for themselves; and it seems highly improbable that, after the words, "He survives to the year 377," an-Nadim himself should have added, "He died in the year 378" (p. 132, l. 7, sqq.); for in that case he would certainly have crossed out the former passage. But at any rate the additions by another hand are not very numerous.

Dr. Flügel had been occupied for many years with an edition of the *Fihrist*. Indeed, as the editor of *Hājī Khātīfa*, he must have felt specially called to bring out this great work ; yet, alas ! it was only vouchsafed to him to see the first sheets of it in print. After his death, Dr. J. Roediger, a son of the celebrated Orientalist, undertook the continuation of the work, with Flügel's materials, assisted by the counsel of Fleischer. The MSS. are very defective ; not one of them is complete, and some portions of the text exist only in a single codex. In addition to this, all the MSS. abound in errors, and many diacritical points are everywhere wanting or misplaced. It should be recognised that the editor has done all that can be fairly expected from an *editor princeps*, and we may hope that in course of time the manuscript material may be augmented. At any rate it will be necessary for several reasons to work through the several sections in the style of a monograph, and this will gradually tend to the improvement of the text, so that a new edition after the lapse of thirty or fifty years will certainly be able to show important corrections. I may allow myself to take the opportunity of indicating some few unimportant corrections, suggested by the perusal of the work. P. 24, l. 1, read *Haizza* (near Arbela), well known to have been an ancient metropolitan see. P. 43, l. 3 sq., the letters R and Z should evidently change places. P. 91, l. 26, *Yazida bni* should be inserted before '*Abdi'lmaliki*', for the narrative does not suit Walid I., in whose time the empire of the Omaiyades stood at the summit of its power, but to the dissolute Walid II. ; cf. de Goeje and de Jong, *Fragm. histor. arab.* i. 127. The year of the death of the grammarian Al-Kisā'i is given differently in three places, p. 30, l. 1 ; p. 65, l. 29 ; p. 204, l. 1. The year 189 mentioned in the last passage is alone correct. For though it is of course possible, it is not very probable, that an-Nadīm himself made a mistake twice over. P. 354, l. 19, we ought certainly to read *Serjīs* ; it is the well-known Syriac translator Sergius of Rēsh 'ainā. P. 111, ult., I should read, not *wallawmu*, but *wallo'mu* ; the "blame" might clearly be unjustified, and in that case would not hurt long, but an "abject disposition" is indestructible.

Dr. Roediger himself recognises it as a defect that the variants are placed, not under, but after the text. Of course, he could not alter the arrangement, as it had been adopted in the sheets edited by Flügel. I am rather disposed to think that the really existing variants are not fully entered in the list ; in a work of this kind it is desirable to exhibit the readings as completely as possible. And I cannot help considering it a strange want of consideration for the reader that no variants at all are given for perhaps the most important passage in the whole book, that relating to Mani and the Manichæans, and a mere reference made to Flügel's book on this passage. We most urgently beg the editor to make good this omission in the second volume, for it is surely too much to expect that every reader who wishes to use that section should procure Flügel's book, when he actually has the best part of its contents in his hands. I could have wished too that Dr. Roediger had not thought it a duty to print Flügel's posthumous preface without even the least change of expression. A passage like this, "Und würde von entschiedenem Nutzen sein, wäre es nur irgendwie brauchbar" (p. xvii, above), would certainly have been altered by Flügel himself.

The preparation of the notes and an index has been undertaken by Dr. Müller. These will form the second volume, which is to appear in the spring. If I might add one more criticism, it would be this, that the book is too dear, at any rate from a German point of view. As the German Oriental Society has borne a considerable share of the expenses, the publisher might surely have affixed a much lower

price. At the same time I cordially admit that the getting-up of the book is excellent. And before parting from the work, I sincerely congratulate Dr. Roediger that he has presented so invaluable a gift to Oriental learning.

TH. NÖLDEKE.

THE DERIVATION OF "BARK."

TO THE EDITOR OF THE ACADEMY.

SIR,—The origin of our verb *bark* has long been a disputed point, English etymologists regarding the word as imitative of the sound it denotes, while German philology has nothing more to offer than the comparison with the Old Norse *barki* (throat). Both views are unsatisfactory, and I have a simpler explanation to propose, which will obviate the unpleasant necessity of adopting the imitation theory, and will not take us off English ground.

Bearing in mind the frequent shifting of *r* in Old English, and its modification of preceding *e* into *ea*, the following series of changes will offer no difficulty:—*brecan, bercan, beorcan*; in short, *beorcan* is nothing else but a variation of *brecan*: *break* and *bark* are the same words.

The change of meaning is well illustrated by the Latin *frangere* compared with *frango*. So, also, in Old English, *gebræc* is used exclusively in reference to sound; and in one passage of Cynewulf's *Crist* (Grein, l. 951) *brecan* itself is employed most unmistakably in the sense of "fremere"—he is describing the Day of Doom:—

"on sefon healifa swōgað windas
blāwað brecende bearhtma mæste."

Grein erroneously separates the word in this sense from the other examples of *brecan* = *frango*, comparing the Old Norse *braka*, which would postulate an Old English *bracian* with present participle *bracigende*.

From the roaring of the wind to the growling and barking of a dog is a short if not a very dignified step.

HENRY SWEET.

P.S.—I have just heard from Mr. Skeat that he has arrived independently at the same conclusion as I have about the original identity of *beorcan* and *brecan*, a fact which considerably strengthens the theory.

Intelligence and Notes.

Under the title *Sprache und Sprachen Assyriens*, Dr. F. Hitzig has published his long-promised investigation of the language of Assyria and Babylonia, which he takes to be a hybrid tongue, Sanskrit in the main, but containing Turkish, Egyptian, and even Semitic elements. This result is obtained from an enquiry (occupying 70 pages) into the Assyrian and Babylonian proper names preserved in Greek and Hebrew authors. The names of Nineveh and Babylon are pure Sanskrit ; the first means "the fish-formed," the second, "city of the sun"! Assyria, on the other hand, is pure Turkish, and means "the country beyond;" Euphrates, half Turkish, half Hebrew, and means "the overstepping water"! Belus is doubtfully, Nebo confidently, derived from the Sanskrit, Mylitta from the Semitic! A law which is assumed to govern the conversion of sounds in Perso-Median and Hebrew is founded on the pretended identity of the Nod of Gen. iv. 16, and Māda=Media (p. 15), and the same law is immediately afterwards (p. 21) used to establish the convertibility of *M* and *N* in Sanskrit and Assyrian! Vocal changes supposed to take place in the two latter languages are gravely illustrated by those which occur in Turkish! As to the Assyrian characters, the author's theory is that they are exclusively phonetic, even if, as Assyriologists affirm, polyphonic, but in no case strictly ideographic. We are astonished, however, to learn from Dr. Hitzig himself that he has only analyzed three lines of an Assyrian text, a rather slender basis for such positive opinions. It would be well in future not to discuss the Assyrian inscriptions in public till he has acquired a somewhat more thorough knowledge of the cuneiform character. He interprets the name commonly spelt Sennacherib, "captain of the host" (p. 78), reading the ideographic signs phonetically, as *Aniskurkit*, which name he composes of Arabic (!) سَنْقَرِيْب, "army," and Sanskrit (!) *x'it*, "commander." Unfortunately the last syllable must be read not *kit* but *su* (O). Dr. Hitzig has simply confounded the two rather similar signs! Further comment is superfluous.

M. Schwab has brought out the first part of a "translation of the Talmud," under the title of *Traité des Berakoth, ou première partie du Talmud de Jérusalem et du Talmud de Babylone* (Maisonneuve). We are unable at present to state how far the ambitious programme of the translator has been realised.

M. Constantine N. Sathas is at present at Venice superintending the printing of his new work in three volumes, which will be entitled *Μεσαιωνική Βιβλιοθήκη*. It will contain a series of inedited chronicles and historical documents concerning the Byzantine empire, the French and Italian principalities and dukedoms in Greece, and the earlier times of the Turkish dominion. The first volume embraces treatises by Michael Attaliata, Nicetas Choniates, and Theodore Metochita; the second is more especially devoted to the mediæval kingdom of Cyprus, and the third contains the compositions relating to the Turkish period. The whole work will consist of about 100 sheets, and will probably be the most important contribution to the history of mediæval Greece that has appeared since the publication of the Bonn *Corpus Scriptorum Historiae Byzantinæ*.

M. Emile Legrand, whose collection of early compositions in modern Greek we noticed in a preceding number (vol. i. pp. 245, 246), is still busy in adding new reprints to his series. We regret that for some reason or other his publications do not always reach us, but are glad to observe that in his edition of the paraenetic poem of Stephanos Sachlekes, which has just reached us, and which is, by the way, the first edition of this extremely curious work, the editor has taken our advice in adding explanatory notes on the more difficult and antiquated words; and from one of his notes we learn that in a second edition of the *Βοσκοτοῦλα* (Paris, 1870, Imprimerie nationale), which we have never seen, the editor has also added annotations. Some of the notes in the present volume betray, however, a somewhat shaky knowledge of the laws of word-formation: e.g. v. 99, *συναρρώματι* is said to be derived from the root *συνάρνημα*, and besides this, M. Legrand ought to have remembered that *συναρρώματι* is very good ancient Greek.

Messrs. Bell and' Daldy are just about to publish an edition of the *Trinummus* of Plautus with English notes by Dr. Wilhelm Wagner, whose edition of the *Aulularia* (five years ago) was very favourably received by English scholars, and has since become a text-book at Eton and other public schools.

In the *Transactions of the Berlin Academy of Sciences* (Oct. 16) Prof. Jacob Bernays publishes a short essay on the dialogue entitled "Asclepius," printed in our editions of Apuleius. That the dialogue is an indifferent translation of a Greek original, and in no sense the work of a master of style like Apuleius, is pretty certain; but it is not equally clear whether we are to assign the original to the beginning of the Byzantine period or to some earlier date. The result, however, of this model of delicate and finished criticism which Prof. Bernays now gives us is (1) that we may set aside sundry passages (in cc. 24–26) as interpolations due to the time when the Christians had become in their turn persecutors; and (2) that there is nothing in the rest of the dialogue which may not be attributed to some Neoplatonic adherent of Polytheism living at the commencement of the third century A.D.

Among the forthcoming books announced by Messrs. Teubner are a second and enlarged edition of Teuffel's *Roman Literature*; an *Historical Syntax of the Latin Language*, by Dr. A. Dräger; a new critical edition of Cicero's *Letters*, by A. S. Wessenberg; a selection of the miscellaneous writings of the late Friedrich Haase of Breslau; and *Studien zur Geschichte der griechischen Lehre vom Staat*, by Dr. H. Henkel.

A continuation of Engelmann's well-known *Bibliotheca Scriptorum Classicorum* is an acknowledged desideratum among scholars, but Herr C. H. Herrmann of Halle, who undertakes to supply the want by a catalogue of recent publications (from 1858 to 1869), seems to have brought little more than good intentions as qualifications for the task. In a review of the book in the new number of the *Philologischer Anzeiger*, our esteemed contributor, Dr. Martin Hertz, points out a number of errors which would certainly cause most serious inconvenience to any English student who took the work as a guide to the modern literature of philology.

We understand that the proprietors of Ellendt's *Lexicon Sophocleum* have instituted a "Nachdrucksprocess" against the firm of Teubner, as publishers of the similar work by Prof. W. Dindorf.

Contents of the Journals.

Zeitschrift für die österreichischen Gymnasien, xxii. pt. 9.—M. Petschenig emends certain passages in the Scholia to Horace, and shows incidentally that Hauthal's edition leaves much to be desired.—J. Oberdick gives us some Notes on Aeschylus, principally on the use of resolved feet in iambic lines. The article is a careful résumé of the facts, but the results of the enquiry do not strike us as new, and some of the textual changes suggested—for instance, that in *Sept. c. Theb.* 576, *καὶ τὸν σὸν αὐθεντὸν πρὸς μόνον*—can hardly be deemed improvements.—Dr. K. Schenkl reviews Jordan's essay "de suasoriorum ad Caesarem Senem de re publica inscriptis," very favourably, maintaining, however, against Jordan—(1) that these suasoriae are earlier than Quintilian's time; and (2) that they are not the work of one and the same writer.

Journal Asiatique, No. 64.—Grammaire pâlie de Kaccâyana, sūtras et commentaire, publié avec traduction et notes; suite. (M. E. Senart.) [See *Academy*, vol. ii. p. 468.]—Réclamation de M. Stan. Julien.

Centralblatt, Dec. 16.—Ahlwardt's Catalogue of Arabic MSS. at Berlin (poetry, belles-lettres, literary history, philosophy), rev. by Th. N.

New Publications.

AHLWARDT, W. Verzeichniß arabischer Handschriften der Bibliothek zu Berlin. Greifswald: Bamberg.

BOCK, Dr. Conr. De Baccharum Euripideae prologo et parodo. Commentatio philologica. Particula prior. Colberg. (Belgard: Post.)

BRACHET, A. Dictionnaire des doublets. Paris: Lib. Franck.

CICERONIS, M. Tulli, de officiis ad. Marcum filium libri tres. Erklärt v. Otto Heine. 4. verb. Aufl. Berlin: Weidmann.

CLASON, Octav. De Taciti annalium aetate quæstiones geographicæ ad mare rubrum et Aegyptum maxime pertinentes. Rostock: Kuhn.

CORNELII NEPOTIS vitæ excellentium imperatorum. Mit e. Wörterbuche zum Schulgebrauch v. Gymn.-Oberlehr. R. M. Horstig. 4. verb. Aufl. hrsg. v. Dr. Fr. Aug. Eckstein. Leipzig: Reichenbach.

DE ROSNY, Léon. Anthologie japonaise, poésies anciennes et modernes des insulaires du Nippon, trad. en français et publ. avec le texte original. Avec une préface par E. Laboulaye. Paris: Maisonneuve.

DINGES, Dr. Henr. De divina rerum humanarum apud Aeschylum moderatione. Pars I. Bensheim: Lehrmittelanstalt.

EGGER, E. Des principales Collections d'inscriptions grecques. Paris: Lib. Franck.

FAIDHERBE. Collection complète des inscriptions numidiques (libyques). Paris: Lib. Franck.

FÉRÉ, Léon. Études bouddhiques. Paris: Lib. Franck.

GRAMMATICI latini ex recensione Henr. Keili. Vol. VI. Fasc. I. Marius Victorinus—Maximus Victorinus—Caesius Bassus—Atilius Fortunatianus ex recensione Henr. Keili. Leipzig: Teubner.

HARTEL, Prof. Dr. Wilh. Homerische Studien. I. [Academy reprint.] Wien: Gerold.

HÜBNER, Aemil. Inscriptions Hispaniae christianaæ. Adjecta est tabula geographicæ in lapide inc. Berlin: G. Reimer.

IBN-EL-ATHIRI. Chronicon. Ed. C. J. Thornberg. Vol. vi. annos 155–227 continens. Leiden: Brill.

IBN-EL-ATHIRI. Supplementum variarum lectionum ad vol. xi. et xii.

JOLY, A. Benoit de Saint More et le roman de Troie ou les métamorphoses d'Homère et de l'épopée gréco-latine au moyen-âge. Tom. 2. Paris: Lib. Franck.

LINNIG, Frz. Germanismus u. Romanismus od. üb. den Einfluss d. german. Elements auf die roman. Völker im Anfang des Mittelalters. Paderborn: Schöningh.

LOPEZ, V. F. Des Races aryennes du Pérou. Montevideo. (Paris: Lib. Franck.)

MASPERO, G. Des formes de la conjugaison en égyptien antique, en démotique et en copte. (Bibliothèque de l'école des hautes études. vi^eme fasc.) Paris: Lib. Franck.

MAVR, Dr. Aurel. Resultate der Silbenzählung aus den 4 ersten Gáthás. [Academy reprint.] Wien: Gerold.

MOSHEH BEN SHESHETH. A Commentary upon the Books of Jeremiah and Ezekiel, by Mosheh ben Shesheth, edited from a Bodleian MS., with translation and notes by S. R. Driver. Williams and Norgate.

QUICHERAT, L. Nonii Marcelli peripatetici Tubursicensis de compendiosis doctrina ad filium, coll. 5 pveret. codd. nondum adhib. etc. Parisiis: ap. Hachette.

SCHLEICHER, A. Laut- u. Formenlehre der polabischen Sprache. St. Petersburg. (Leipzig: Voss.)

SOCIÉTÉ DE LINGUISTIQUE DE PARIS, Mémoires de la. Tom. 1, fasc. 4. Paris: Lib. Franck.

SOPHOCLES: the Plays and Fragments. Ed. with English Notes and Introduction by Lewis Campbell. Vol. I.: Oedipus Coloneus, Oedipus Tyr., and Antigone. Oxford: Clarendon Press.

STRATMANN. Dictionary of the Old English Language, compiled from writings of the 12th to 15th centuries. Part I. New ed. Trübner.

VIGFUSSON, G. Cleasby's Icelandic English Dictionary: enlarged and completed. Part II. Oxford: Clarendon Press.

WEDGWOOD, H. Dictionary of English Etymology. 2nd ed. Thoroughly revised and corrected by the author, and extended to the classical roots of the language. With an introduction on the formation of language. [Five Monthly Parts, December to April.] Parts I. and II. Trübner.

THE ACADEMY.

"INTER SILVAS ACADEMI QUÆRERE VERUM."

Vol. III.—No. 40.

Readers are reminded that the mention of New Books, Articles, &c., in our lists is intended as a guarantee of their importance. The Editor of THE ACADEMY cannot undertake to return communications which are not asked for. The next number will be published on Thursday, February 1, and advertisements should be sent in by January 27.

The Second Volume (October 1870 to December 1871) is now ready, bound in cloth, price 15s. Covers may be had of the Publishers, price 2s.

Literature.

NORSE MYTHOLOGY.

La Fascination de Gylfi (Gylfa ginning). Traité de Mythologie scandinave, composé par Snorri, fils de Sturla, traduit du texte norraïn en français et expliqué dans une introduction et un commentaire critique perpétuel par Frédéric-Guillaume Bergmann. Deuxième édition, augmentée de notes additionnelles et d'un répertoire général alphabétique. Strasbourg et Paris : Treuttel et Würtz.

Le Message de Skirnir et les Dits de Grimnir (Skirnisför-Grimnismál). Poèmes tirés de l'Edda de Saemund, publiés avec des notes philologiques, une traduction et un commentaire perpétuel par F.-G. Bergmann, ex-doyen de la Faculté des Lettres de Strasbourg. Strasbourg et Paris : Veuve Berger-Levrault et Fils.

Die Edda, die ältere und jüngere, nebst den mythischen Erzählungen der Skalda übersetzt und mit Erläuterungen begleitet von Karl Simrock. Vierte, vermehrte u. verbesserte Aufl. Stuttgart : Cotta.

THE general knowledge of the subject and character of the *Edda* possessed by all educated persons seldom extends to a direct and familiar acquaintance with the two works which bear that name ; this, at least, is the case in England and France, and if the remark applies in a less degree to Germany, this is chiefly owing to Simrock's successful exertions in the work which has just reached its fourth edition. I say successful, for Bergmann's labours were much less fortunate, in spite of his indefatigable zeal, in spreading a knowledge of Northern antiquities in France, though his first attempt in that direction was made as long ago as 1838 (*Poèmes islandais*, &c.). There are several ways of explaining his want of success : the old Norse poetry and mythology does not appeal so closely to the French mind and taste as to the German, or rather the Teutonic. The national interest in the subject is also wanting which enabled Simrock to begin his introduction with the words : "That the gods of the North were ours also has long been certain ; the brother stocks, German and Norse, had in all essentials a common belief as well as common speech, laws, and customs ; Odhin is Wuotan, Thor, Donar ; Asen and Ansen, Alfen and Elfen, Sigurd and Siegfried, are only other forms of the same mythical names." Finally, the extent and thoroughness of Bergmann's erudition has probably had a deterrent effect upon the majority of readers, and caused his works to make their way but slowly, as in the case of the *Fascination de Gylfi*, which has been ten years in reaching a second edition. He is anxious to trace every peculiarity home to its origin, and to make every difficulty so clear to his own mind that, where reliable evidence is wanting, he takes refuge in conjectures, in the course of which the phrases "sans doute" and "probablement" occur much

VOL. III.—NO. 40.

too frequently, and substitutes, with a daring worthy of Niebuhr, his unsupported hypotheses for established facts. He is as much at home with the language and antiquities of the Pelasgi, the Scyths, and the Getae as with that of the ancient Scandinavians ; and the general reader, at least in France, does not care to follow his minute explanations of every detail in so wide-reaching a plan. To the, alas ! small class of more conscientious students, Bergmann's works may be warmly recommended.

The first of the works before us contains, to begin with, a summary survey of the rise and development of religions and mythologies in general, and then a circumstantial account of the Norse mythology and its history, of the customs and usages therewith related, and of the sources from whence our knowledge of it is derived—that is to say, the so-called *Elder* and *Younger Edda*. *Edda* means properly "Great-grandmother," and, according to Bergmann, the collection known as the *Younger Edda* received the name from the Skald Olafr (d. 1259) who applied it in the sense of "annosa narratrix," because *Gylfa ginning*, which stands at the head of the collection, relates the old Northern myths. Bergmann gives a full account of all the literary works of Snorri Sturluson (d. 1241), the author of this portion and of the *Bragarœdur*, and of the methods and aim kept in view by him ; and he takes occasion, by the way, to convey information on a variety of subjects which would scarcely be looked for in such a place—as, for instance, the literary contests of early times, of which the *Wartburgkrieg*, so well known in German literary history, was one ; the origin of the narrative framework to groups of tales used by Boccaccio and Chaucer ; the titles of books amongst the ancients, in the East and in the middle ages ; the glacial period ; the distinction between the expressions "scientifique" and "littéraire" ; the etymology of the Mediæval Latin *sunnis*, &c. &c. All these things are interesting and instructive, and though the remark "sed nunc non erat his locus" might suggest itself, they are really a symptom of his desire to exhaust every topic which is related, however remotely, to his principal theme. Thus he shows that "Great-grandmother," though it may seem a strange name for a mythological treatise, is well grounded, and has parallels in every literature ; the foundation of the *Gylfa ginning* is a literary contest, which at the same time serves as a framework ; then there is an obvious reference to the glacial period in one part of the Norse cosmogony and theogony ; the author argues that Snorri's intention and method was "scientific" rather than "literary" ; and, finally, the name of the goddess *Syn* is connected etymologically with *sunnis*, and this again with two quite distinct families of words, &c. &c. In the etymology and interpretation of the names of persons and localities, Bergmann has done his uttermost for the reader's instruction, and as he generally gives the grounds on which they are based, it becomes possible to attach an idea to every name. At the same time, there are serious objections to his practice of always making use of the equivalent he has invented for each proper name. It is tiresome to have to read always *Enclos-mitoyen* for *Midgardr*, *Troupiers-uniques* for *Einheriar*, *Halle des Occis* for *Valhöll* (Valhalla), *Loki de l'Enclos-extérieur* for *Utgard-loki*, *Mecunier* for *Mülnir*, *Large-Éclat* for *Breidablick*, &c. &c. A better plan would have been to retain the old names, and give their meanings in a separate alphabetical table. A serious reader need not, however, be discouraged by these peculiarities from availing himself of the author's varied stores of learning. Besides the subjects already alluded to, there is a particularly good explanation of the origin of the custom of swearing brotherhood in arms under a strip of turf (p. 351), and of the reason why

the gods begin again after the renewal of the world to play at the same game as they had played before when they were young.

Some of Bergmann's explanations differ from the common traditional ones. According to him the god Thor generally goes on foot, because in the seventh century A.D., when the Scandinavian population began to be divided into peasants and nobles, Thor became the patron of the former, and followed their custom in this respect, whilst Odin, the god of the warlike aristocracy, seldom appears except riding on his steed Sleipnir. Again, the ordinary view of Freyja's car drawn by cats is that the cats refer to her position as goddess of love, as the corresponding Egyptian goddess Bubastis is represented with a cat's head. Bergmann on the contrary thinks that the cat, a domestic animal whose favourite resting-place is on the hearth, belongs to Freyja as the household goddess, whose name in fact means ruler or mistress in the sense of a wife or mother of a family. The points on which he differs from his predecessors are too many for enumeration, and I will only add that, while constantly referring to the religion of the ancient Getae and Scyths (according to him the fathers and grandfathers of the Scandinavians) as he conceives it to have existed, he pays no attention to other religions excepting those of the Slavonians and Indians, both of which have, according to Bergmann, features in common with the Norse mythology. Here we may take leave of Bergmann's *Gylfa ginning*, which, together with *Bragaroedur*, forms, as we have observed, the chief part of the *Younger Edda* of Snorri Sturluson. The remainder, consisting of a Norse *Ars Poetica*, was added after Snorri's death (1241), and the whole collection, in Bergmann's opinion, first received the name of *Edda* after the middle of the thirteenth century. This *Younger Edda* is in prose, whereas the so-called *Elder Edda* contains a collection of mythological and epic songs, of which some may have been in existence before the time of Snorri and known to him, though the work did not take its present shape till the beginning of the fourteenth century according to Bergmann (the middle of the thirteenth according to other authorities), and was not called *Edda* and ascribed to Saemund the Wise (*d. 1133*) until the sixteenth century. On this point, however, Bergmann is at variance with himself, for in the *Fascination*, p. 41, he says: "Le nom de *Edda* était inconnu à Saemund et à Snorri; le premier n'a jamais composé le Recueil de poèmes qu'on lui attribue et qu'on appelle aujourd'hui l'*Edda de Saemund*; le second n'a jamais eu entre les mains un tel recueil, composé par Saemund." Yet in his other work, *Le Message de Skirnir*, he speaks of the "homme érudit (probablement Saemund le savant) qui à la fin du onzième siècle a formé et composé par écrit la collection des chants appelés poèmes de l'*Edda de Saemund*." In both these passages Bergmann gives a reference to an earlier work, *Les Chants de Sôl* (*Solar Liðd*), poème tiré de l'*Edda de Saemund*, publié avec une traduction et un commentaire, Strasbourg et Paris, 1858, p. 18, where he says: "Quant à la formation du recueil de l'*Edda de Saemund*, de fortes raisons nous empêchent de l'attribuer à Saemund." It would therefore seem that the passage in *Le Message de Skirnir* is a slip of the pen or the memory; but in the *Chants de Sôl* Bergmann adduces arguments, which I am inclined to regard as conclusive, to prove that Saemund was really the author of the *Solar Liðd*, and Simrock agrees with him so far as to admit that this is probable. It is to be regretted that the date of the other songs in the *Elder Edda* cannot be determined with the same precision; but unfortunately with the exception of *Skirniför* and *Grimnismál* (for which see below) this is far from being the case, though we must suppose at least a portion of

the poems, especially the mythological ones, to stretch back into the period of heathenism. Bergmann usually gives the reasons which have determined him in his choice of dates, so that in these questions the reader is always enabled to form an independent judgment. When he omits this precaution, his views have less chance of acceptance, as for instance when he says that in about the third century B.C. the Scandinavians invented new divinities who were no longer zoomorphic but anthropomorphic (*Fascin. de Gul.* p. 201; cf. p. 219); that the Sviones and Gauts, Getic tribes, settled in Scandinavia in the fourth century B.C. (p. 263); that in the sixth century B.C. Targitavus, the anthropomorphic sun-god of the Scythians, was looked upon as the protector of the family and the nation (p. 265), &c.

The second of the works before us takes its subject from the *Elder Edda*, and is in some sense a continuation of the one which first made Bergmann favourably known in the learned world, namely, *Les Poèmes islandais* (*Voluspa, Vafthrudnismál, Lokasenna*), tirés de l'*Edda de Saemund* et publiés avec une traduction, des notes et un glossaire par F.-G. Bergmann, Paris, 1838. Since then considerable progress has been made in investigations of this kind, the results of which have been utilised in the *Message de Skirnir*, &c.; and the introductions and commentary supply a compressed summary of the author's previous researches into Northern mythology, for which the nature of the two poems gives a suitable opportunity. The translation is in prose, and like that of *Gylfa ginning*, word for word, so that any one desirous of studying the language of the ancient North apart from its mythology will find it a useful assistant. I will only mention two passages in the introduction to *Skirniför*, which are of comparative general interest. Bergmann derives the German name for February, *Hornung*, from *horn*, which, he thinks, in German idiom, means hard ice (Old Icelandic *hiarn*, frozen snow), so that January, when the frosts are most severe, would be called the *great horn*, and February the *little* or *younger horn*. The Greek *ἥρως*, "hero," as well as the Latin *verres*, he derives from the Sanskrit *varahās*, "boar," because the warlike nature of this animal makes his name a suitable designation for a famous warrior; he does not, as he might, quote the example of William de la Mark, the famous *Sanglier des Ardennes*, in support of his suggestion. From the introduction to *Grimnismál*, I will only quote Bergmann's division of the mythological poems of the North into three distinct periods, of which the first extends approximately from the fourth to the seventh century A.D., and bears a lyric-epic character. The poet, who was always anonymous, generally gave a short prose introduction before plunging *medias in res*. The second period, which reached into the eighth century, produced no new myths, as the Scandinavian mythology had attained its highest point in the seventh century, but it preserved those already existing, and handed them down both in writing and tradition. The character and form of these still anonymous poems is dramatic-didactic, that is to say, dialogue alternates with narrative; and there is a didactic or literary purpose which demands a poetical framework in addition to the prose introduction. In the third period, which begins in the eighth century, political and religious changes took place which modified the character of the poetry, and introduced Scalds of known name, who only made use of the heathen mythology occasionally, and for purposes of illustration. *Skirniför* and *Grimnismál* belong to the second of these periods. Bergmann's translation and explanation of the latter poem differs very considerably from those in favour with his predecessors; this is especially the case with regard to strophe 45, pp. 257 and 305.

We have only now to notice Simrock's work, which differs from those already discussed inasmuch as it gives a com-

plete translation of the 37 songs of the *Elder Edda*, and from the *Younger*, both *Gylfa ginning*, *Bragaroedur*, and the mythical tales of the Skalda which are united to the *Younger Edda* in our own manuscripts as well as in published editions. The translation aims at preserving the alliterative metre of the poetic *Edda*, so it has naturally less verbal accuracy than that of Bergmann; the notes and introductions to the *Elder Edda* are comparatively scanty, those on *Grimnismál* and *Skirnisför* together occupying only eight pages against 110 of Bergmann, and the *Younger Edda* has no notes, as it is supposed to be sufficiently explained by what goes before. The explanation of this difference no doubt is that Simrock presupposes in his readers a considerable acquaintance with the *Edda* and its subjects, and though his preface reproaches Germans with their indifference to these studies, the number of editions reached both by this work and his *Deutsche Mythologie* shows that he really finds a large and intelligent public. Still any one wishing to acquire a knowledge of Norse mythology cannot do better than begin with Bergmann, whose merits as a thorough master of Scandinavian language and antiquities have received honourable recognition in Sweden and Denmark; and if the student then wished to proceed further, he would be able under Simrock's guidance to complete his knowledge of both *Eddas*, especially the Elder. Before leaving Simrock (whose work I may discuss at greater length elsewhere), I will allow myself two observations. In the *Fafnismál* (Simrock, p. 200) it is related that Sigurd could understand the voice of birds as soon as he had tasted the heart's blood of Fafnir, transformed into a dragon. This seems to point to an old Oriental superstition, for in Philostr. *Vita Apollon.* i, 20, we read: ἔστι γὰρ τῶν Ἀράβων ἦδη κονὸν καὶ τὸ ὄρνιθων ἀκούειν μαντευομένων ὅπόσα οἱ χρηστοί. ἐνυπβάλλονται δὲ τῶν ἀλόγων, στούμενοι τῶν δρακόντων οἱ μὲν καρδίαν, φασὶν, οἱ δὲ ἥπαρ; and the same is said of the inhabitants of the Indian town Paraka (*ib.* iii. 9): λέγονται δὲ καὶ τῶν ζών ἔννεπαι φθεγγομένων τε καὶ βουλομένων (var. βουλευομένων), στούμενοι δρακόντος οἱ μὲν καρδίαν οἱ δὲ ἥπαρ. On the first passage Olearius says: "Gemina et ex Arabico scriptore Damir habes apud Bochart. *Hieroz.* p. i. l. 1, c. 3, fin." My second remark refers to the famous Danish king Hrolf Kraki (the German *Knirps*, mannikin, dandiprat, not *Krähe*, *kraka*, "crow," as Simrock translates it on p. 353). Of this Hrolf the Skalda relates (Simr. p. 353) that he was once being pursued by king Adils and his Swedes, and escaped with his followers by scattering gold along the road, which his pursuers stopped to pick up. This trait is paralleled in *Buddhaghosha's Parables* (by Capt. Rogers and M. Müller, p. 43), where the fugitive king Udena uses the same stratagem against the hostile king Kanddappaggota; and again in a Teleutic legend (W. Radloff, *Proben der Volkslitter. der Türkischen Stämme Südsibirien*, Petersb. 1866, vol. i. p. 210), where the following story is told of Schydar Ubang: "He sold all his horses, cows, sheep, and other possessions for copper money, with which he loaded 300 camels. He crossed the waters of the Irtish, and on the further side he poured out all the copper on the ground. The white king's (*i.e.* the Czar's) three generals and 300 soldiers who were bringing 30 waggons of munitions with them, gathered up the copper money and loaded it upon the 30 waggons. Schydar Ubang said: 'Take the money strewn upon the ground, but do not pursue me.' Thus he deceived them with money, and went back and betook himself to the Chinese." See also Frontin. *Strateg.* 2, 13, 1: "Galli pugnatur cum Attalo, aurum omne et argentum, certis custodibus tradiderunt, a quibus, si acie fusi essent, spargeretur, quo facilius praeda hostem impeditum effugerent." 2. "Tryphon, Syriae rex, victus, per totum iter

fugiens pecuniam sparsit, eique sectandae Antiochi equites immoratos effugit." Of course these different stories of scattering gold and money may have arisen independently of each other.

In conclusion, I can only recommend the above three works once again most warmly to all classes of readers, and must not omit to quote the last words of Bergmann's preface to *La Fascination de Gufi*:—"Cet ouvrage se vend au profit de la Bibliothèque de Strasbourg, qui, entièrement brûlée, est à reconstituer." Bergmann was one of the most distinguished professors and dean of the faculty of letters in the former university of Strasburg, whence his interest in the restoration of its library.

FELIX LIEBRECHT.

Sing-Song: a Nursery-rhyme Book. By Christina G. Rossetti. With 120 Illustrations by Arthur Hughes. Routledge.
The Princess and the Goblin. By George Macdonald. Strahan.
Through the Looking-glass, and what Alice saw there. By the Author of *Alice's Adventure in Wonderland*. Macmillan.
More Nonsense; Pictures, Rhymes, Botany, &c. By Edward Lear. Bush.

IT is pleasant to see children's literature get better as it does year by year in England. This season in particular has produced a crop of books that are delightful for them—for the children—but more delightful still, perhaps, for some among their elders; since no child, in the most enchanted eagerness of its single-minded attention and fancy, knows so full or so subtly mingled a pleasure in the best of these things as the properly constituted grown-up reader. The adult spirit here finds the reward of its affliction of self-consciousness. While the attention, the fancy, can let themselves go, and be as those of a child, following the fun or movement of the tale with all the old mirth, the old breathlessness, there lingers, beneath such abeyance of criticism, a more complex self looking on somewhere in the background, aware of the revival of ancient spells, and pleased to feel them work:—you have your own enjoyment to enjoy as well as its object, you have a hundred causes of pathetic entertainment side by side with the old absorption.

The volume written by Miss Rossetti, and illustrated by Mr. Hughes (not, by the way, a matter of story-telling but of song-singing), is one of the most exquisite of its class ever seen, in which the poet and artist have continually had parallel felicities of inspiration—each little rhyme having its separate and carefully engraved head-piece. In the form of the poetry the book answers literally to its title, and consists of nothing but short rhymes as simple in sound as those immemorially sung in nurseries—one only, of exceptional length, containing as many as nine verses—and having always a music suited to baby ears, though sometimes a depth of pathos or suggestion far enough transcending baby apprehension. But both in pictures and poetry, provided they have the simple turn, and the appeal to everyday experience and curiosity, which makes them attractive to children at first sight and hearing, the ulterior, intenser quality of many of these must in an unrealised way constitute added value, we should say, even for children. The pieces range, indeed, as to matter, from the extreme of infant punning and catchy triviality to the extreme, in an imaginative sense, of delicate penetration and pregnancy, with an almost equal grace of manner in either case; here is an example of the latter:

"What are heavy? sea-sand and sorrow:
 What are brief? to-day and to-morrow:
 What are frail? spring blossoms and youth:
 What are deep? the ocean and truth."

And this is illustrated with one of the best of Mr. Hughes' landscape cuts—a still, flat sea flooded with moonlight, under

a black sky, with a child's sand-castle going to pieces at its edge. There are some dealing with death—a motherless baby, a ring of three dancers from which one is caught away—in just the right mood of tender thought and plaintive wonder, striking the mere note of loss, unexplained disappearance, the falling of an unknown shadow, with the loveliest feeling; and many about out-door things, birds and flowers, animated with an intimate fanciful charity, or having sometimes a little ethical conclusion, of which the lesson cannot fail to find its way home. In tuning the simplest fancies or hints of fragmentary idea, Miss Rossetti cannot lose the habit or instinct of an artist; and the style and cadence of these tiny verses are as finished and individual, sometimes as beautiful, in regard of their theme, as they can be, and not much recalling any precedent, except in a few cases that of Blake. We would direct the reader to pp. 6, 13, 21, 38, 40, 120, for perfect scraps of art in their way. Mr. Hughes' illustrations, many of them lovely and full of imagination as we have said, and always seconding the suggestion of the verse, are not quite equal, and the sentiment is sometimes in advance of the design: but what can be more delightful than the child feeding birds at the winter window on p. 8, or its *vis-à-vis* supping porridge in the ingle, or the lambs and ducklings of pp. 27 and 29, or the landscapes of pp. 35 and 79, or the pathetic dance of p. 73, or the pancake-making (79), or, indeed, a full half of them all.

Mr. George Macdonald is a poet also, and in his *Light Princess* had already achieved a humorous and imaginative success in that most difficult of all tasks, the invention of contemporary mythology for children. We should say that with this writer, more than most, it was hit or miss; other pieces in the volume containing *The Light Princess* we should count misses. Here, again, and on a larger scale than before, the hit is palpable and delightful. *The Princess and the Goblin* does not perhaps contain any invention so felicitous as that of the child to whom an evil fairy had denied the physical property of gravity; but it is a thoroughly beautiful and enjoyable story, and its machinery of princess and nurse, heroic miner-boy, evil subterranean goblins, and beneficent supernatural grandmother in her tower, thoroughly calculated to take hold of the imagination of readers of all ages. The suppressed personage within our grown-up reader will be knowing enough to observe, from his background, that there is allegory in all this; aware of the religious and ethical pre-occupations of the writer's genius, he will guess what the beneficent grandmother is meant more or less explicitly to stand for—will, if he chooses, be able to note how it is even the moral and religious foundation that has stimulated the writer's invention and developed the turns and incidents of the story. But all this really does not at all spoil this charming fable, as it has so many others; the narrative and scenic parts of it are conceived with a vividness of their own, alongside of the ethical part of the conception; the characters are delightfully dramatic, and there is nothing strained in the tone of purity and elevation which is given to them. Against unctuous, when unctuous passes into such bright imaginative devices as these, and only gives a peculiar ring and fervour to their pathos or their humour, the most uncompromising opponent of moral story-writing can have nothing to protest. Mr. Macdonald in this story is long, detailed; but he has the art of having been there (so to speak); and the attention never flags during all the adventures of the little Irene with her mystic friend in the tower, and the brave Curdie with his goblin enemies in the mine. The sympathetic talent of Mr. Hughes in this volume again has been employed in furtherance of the writer's fancy, and his designs (though not so fully in his choicest manner, perhaps, as those we last spoke of) are very delicate and ingenuous.

We pass from poetical enchantment to prose fun in passing from the work of Mr. Macdonald to that of Mr. "Lewis Carroll"—from the transformation scene to the harlequinade, if one may venture that imperfect parallel. *Through the Looking-glass* is a sequel to *Alice in Wonderland*, and has the misfortune of all sequels—that it is not a commencement. An author who continues himself loses the effect, although not the merit, of his originality; and in its originality lay half the charm of the old "Alice." No reader will have the sense of freshness and the unforeseen, amid the burlesque combinations which the little lady encounters in her new dreamland, which he had amid those of the old; hence the inevitable injustice of a comparison. But, making allowance for the sense of repetition, we think the invention here shows no falling-off in ingenuity or in the peculiar humour, which mixes up untransformed fragments of familiar experience with the bewilderment of the polite child amid people of irregular manners and a topsy-turvy order of existence. There is perhaps a little too-much complication in the machinery of chess-board geography prevailing in *Looking-glass Land*, and a somewhat meaningless eccentricity in some of the transformations; but the ingenuity which traces out the remotest consequences of its data cannot be too much praised,—as the property of space in *Looking-glass Land* by which to walk towards a thing is to move away from it, and the inverse disposition of the letters in the amazing nonsense-poem of "Jabberwocky." The introduction and conclusion of the adventure are particularly well devised and written. Every reader will be charmed to meet his old friends the Hare and the Hatter (still engaged upon his tea and bread and butter) dignified with the Anglo-Saxon orthography Haigha and Hatta (Alice has evidently been having lessons in English history); and amused at the forms under which the child's matter-of-fact dream realises the ideas of Tweedle-dum and Tweedle-dee, Humpty Dumpty, and all the provoking brotherhood of mythic personages who insist on taking all words literally, and regarding every question as a riddle. If this prose extravaganza, this matter-of-fact absurdity, has a certain ugliness at times which seems to run near the edge of the vulgar, that is its only weak point. The clever and mannered humour of Mr. Tenniel's designs illustrates their theme to perfection.

A stout, jovial book of *More Nonsense*, by Mr. Edward Lear, transcends criticism as usual. We may just indicate the interest of the preface, in which the author explains the genesis of this class of composition; we may point out the great felicity of some of the new botanical figures and names—"Nastycreechia Krorluppia," "Stunnia Dinnerbellia," and the rest; we may protest, with deference, against the absence of the charms of rhyme in the alliterative pieces at the end of the volume; and then leave the reader to his unmolested entertainment.

SIDNEY COLVIN.

Prince Hohenstiel-Schwangau, Saviour of Society. By Robert Browning. London: Smith, Elder, and Co., 1871.

MR. BROWNING has always had a predilection for the type of characters which the moralist finds it convenient to class as hypocrites. An artist who begins to analyse character quite disinterestedly is met very soon by the difficulty which character he is to analyse, the character which the man indulges or the character which he assumes; nor is it allowable to cut the knot and say that a man is what he allows himself to be, and is not what he assumes himself to be. The assumption seriously influences his conduct, and it is quite as essential to his comfort that the assumption should impose upon himself as that it should impose upon others;

if it come to the point, he would even prefer to allow himself in less rather than give up the assumption altogether. In fact, the study of human character, in general, might almost be resolved into an attempt to ascertain the true relations between what we claim to be and what we tend to be ; and this problem is obviously best approached in the individuals in whom the contrast assumes the most piquant form. In the same way the ethical distinction between honest men and rogues is replaced by the æsthetical distinction between those who recognise and accept and those who rebel against the inevitable contrast between the ideal and the natural self. On the one side we have Mr. Sludge and Bishop Blougram and the bishop who orders his tomb in St. Praxede, and the other bishops who display their successful or unsuccessful diplomacy in the *Return of the Druses* and *The Soul's Tragedy* ; on the other side, there is the noble Djebal, one of the loftiest of all tragic characters, and the pitiful Chiappino and poor Mr. Gigadibs. It is worth noticing that Djebal comes nearest to the common conception of a common imposter, just because his enthusiasm is too deep not to be practical, too sustained not to become unscrupulous, while the worthless Gigadibs is too shallow to be unsincere.

Of course the Saviour of Society belongs to the more intelligent if not to the more estimable class. The machinery of the poem is intricate, and it is difficult to believe that the whole of it was written upon a single plan. For 142 pages out of 148 the Saviour of Society, in exile, is explaining his career to a young lady ; nearly 60 pages of the explanation are a history of his reign as it ought to have been, which is carried down to the end of the Italian war. Here the speaker discovers that it is five o'clock in the morning, opines that the young lady is asleep, moralises on the impossibility of a really sincere *apologia pro vita sua*. In the last half-page we learn that he has not yet begun his second exile, has no young lady to talk to ; but the whole reverie has arisen out of the possible consequences of an ultimatum, which he has still to decide upon sending. On the other hand, he says early in the poem :—

“ I could then, last July, bid courier take
Message for me, post-haste, a thousand miles.”

These lines and the whole context prove that the speaker was intended to be actually in exile, not merely anticipating what he would say when he was. It seems as if the poet had felt the ideal history of Prince Hohenstiel-Schwangau's reign was getting too long, and had altered his plan in order to cut it short with effect : in a way the effect is gained, but it is at the price of an inconsistency which makes the last six pages very obscure. Another matter for regret is that the history of Hohenstiel-Schwangau should be simply identical with the history of France. One can understand the author's motive for choosing to write of Hohenstiel-Schwangau ; but the choice entailed obvious obligations. It would have been very indecorous for Johnson to make the senate of Lilliput debate an expedition to Canada, and it is little better to make Thiers an historian, and Victor Hugo a poet of Hohenstiel-Schwangau.

The Saviour of Society is, as might be expected, a very interesting personage, a little tedious to those who are beginning his acquaintance, but decidedly attractive and even fascinating when we come to know him well. He is represented as a kind of democratic man of order, a Sulla of the proletariat, incapable of founding anything, but capable of organizing and consolidating much.

His exposition begins by pointing out that even when he is playing with a sheet of blotting paper, he prefers drawing a line between two blots that are there already to making a third, which proves a predisposition on his part to avail him-

self of existing materials. Some sixty lines are allotted to bring this piece of information adequately home to the reader, and of the sixty quite the usual proportion are elliptical, and none are empty. It is an extreme result of the author's deliberate system of endeavouring to present the processes not merely the products of thought. With this predisposition he enters upon life determined to please himself and serve God by making the best according to his own judgment of the faculties of which he finds himself in possession. The example of the courier, cited above, who must reach his journey's end in time, but may select the stages, and halt or hurry at his own discretion, serves to illustrate the kind and the extent of the responsibility under which the speaker conceives himself to act. Others, he is willing to allow, may have something like what is ordinarily called conscience to direct the details of their conduct ; he has to judge exclusively by the light of general principles, by the facts of life, by the signs of the times. He finds himself inclined and qualified to govern a world that has laboriously and gradually reached a complicated harmony, which, though most imperfect, is tolerable. He is filled with respect for this order and compassion for the multitude—

“ Men with the wives and women with the babes,”

who desire nothing better than to be allowed just to live and work under it. He determines to devote himself to the defence of the mediocre positive results of civilisation against the enthusiasts who would destroy them in the pursuit of incompatible ideals. If the average duration of life were a hundred years instead of twenty, he would risk the responsibility of carrying out one of the ideals he advocated himself in the days when he was only a voice like his critics. As it is, he consoles himself with the thought that the low interests which unite the many are more in one sense than the high interests which divide the few who had better do their best—

“ Without this fractious call on folks to crush
The world together just to set you free.”

The accusation of indolence and indecision is met by a capital story of the Laocoön, which, it seems, was once exhibited without sons or serpents, and taken almost universally for a figure of Somnolence. One critic only whom the Saviour of Society would choose for his biographer said—

“ This attitude
Strives with some obstacle we do not see.”

The faults of his reign are attributed to an excess of sagacity which led him to profit by the crime of his predecessors to occupy Rome, to avoid the chance of civil war by a *coup d'état* incompatible with ideal loyalty, to wean Hohenstiel-Schwangau from war by false pretences, to obtain territorial advantage by the Italian war, to temporise with the papacy, and, above all, to try to found a dynasty.

The exposition is less perplexed than in Mr. Browning's earlier works, perhaps less richly coloured ; though it would be difficult to parallel the musical elevation of the following passage :—

“ Ay, still my fragments wander music-fraught,
Sighs of the soul, mine once, mine now, and mine
For ever ! crumbled arch, crushed aqueduct,
Alive with tremors in the shaggy growth
Of wild-wood, crevice-sown, that triumphs there,
Imparting exultation to the hills !
Sweep of the swathe when only the winds walk
And waft my words above the grassy sea
Under the blinding blue that basks in Rome,—
Hear ye not still— Be Italy again ?!
And ye, what strikes the panic to your heart ?
Decrepit council-chambers,—where some lamp
Drives the unbroken black three paces off
From where the greybeards huddle in debate,
Dim cowls and capes, and midmost glimmers one

Like tarnished gold, and what they say is doubt,
And what they think is fear, and what suspends
The breath in them is not the plaster patch
Time disengages from the painted wall
Where Rafael moulderingly bids adieu,
Nor tick of the insect turning tapestry
To dust, which a queen's finger traced of old ;
But some word, resonant, redoubtable
Of who once felt upon his head a hand
Whereof the head now apprehends his foot."

G. A. SIMCOX.

NOTES ON LITERATURE AND ART.

The articles of Chief Justice Cockburn on Junius are unavoidably postponed for one or two numbers.

The *Westminster Review* for this month has a very interesting but incomplete article on Greek tragedy and Euripides. There is a good account of the conditions under which a great dramatic era is possible. It is shown how after a certain stage in dramatic art as in other art the execution tends inevitably to overpower the idea ; and how Euripides coming at this stage made the most of the romantic and picturesque possibilities of Greek tragedy. Much is made of analogies from painting too suggestive not to be misleading. For instance, we are told that Correggio gave a disproportionate development to some elements of beauty which were subordinate in Raphael, and that Euripides gave a disproportionate development to elements of interest that were subordinate in Sophocles. But the pictures of Correggio, and for that matter the plays of Fletcher, are thoroughly complete and harmonious ; for the most part the plays of Euripides are not. The point of the attacks on Euripides is missed. Those who say that Euripides debases tragedy are quite aware that he wrote splendid poetry : they would be quite ready to admit that the ethical elevation of Sophocles could not be maintained for ever. Their quarrel with Euripides is not that his creations are romantic rather than classic ; but that their habitual background is a vulgar selfish sophistry.

M. Gaidoz, in the same place, publishes some interesting translations of the Breton poetry inspired by the events of the late war ; which appears in most cases to have been written not by the people but certainly for it, since the *bourgeoisie* look down on their native idiom. The writer believes that the Breton peasants, like the Welsh, would learn to read readily if they had books in their own language, and it is curious that the Legitimists and Republicans have to bid against each other in *patois* for the country vote. The manifestoes of the former are said to be the best models of style, as many of the clergy have made a special study of Breton literature.

A shareholder in the "Société d'Acclimatation" sends to *Fraser* a short account of the fate of the Jardin and its inmates. Some few of the most valuable animals were sent out of Paris just before the commencement of the siege, and the remainder were reluctantly disposed of to the butchers, fetching, however, their full money value. The gardens themselves were devastated under the Commune, and the society is treating with the city of Paris for the repurchase of the land ceded to it, but it offers to superintend the reorganization of the work, and a fresh company is spoken of to carry this out on a larger scale than before.

Afzelius, the venerable collector of Swedish folk-songs, died on the 25th of September last at Euköping, where he had been pastor for forty-nine years. His great work, *Svenska Folkets Sagohäfder*, was completed in 1870, the last part containing the history of Charles XII., since when no true popular legends have come into being.

We have received a specimen number of a new series of the *Oesterreichische Wochenschrift für Wissenschaft und Kunst*, which formerly appeared for a few years as supplement to the *Wiener Zeitung*. There ought to be plenty of room for such a periodical, especially if it does not give too much space to the miscellaneous *feuilleton* element. In this number the principal

papers are by A. Mussafia on F. Diez, *d'après* of the 50th anniversary of his doctorate ; and Fr. Lippmann, "Die Styltendenzen im Kunstgewerbe." The author thinks that the initiative unreality of modern art and architecture can only be superseded by a healthier and more independent tone of workmanship, on condition that the Renaissance is frankly accepted as its base and starting-point.

There is a Breton work now in the press, to be published next spring, by Mrs. Legoffic, Lannion, which will have some interest for the literary world at large. It is a mystery (*Trajeti*, as the Bretons call it), the subject of which is the well-known Purgatory of St. Patrick. The most striking peculiarity of this mystery is that a few scenes are nearly identical with some passages in a drama of Calderon, who has treated the same subject. It will be interesting to trace these resemblances to an original work. The mystery will be published without French translation, as it is intended for the Breton-reading public only. Bretons are very fond of reading—and of performing—mysteries ; but when such a performance takes place in some Breton village, it is apt to pass unnoticed, even in France.

The discoveries made in the neighbourhood of Bologna must take the first place amongst the events of archæological interest which have occurred during the past year. A full account will be found in a paper, "Sugli Scavi di Certosa," read by the architect Signor Antonio Zannoni, at the inauguration of the museum of Bologna, Oct. 2, 1871, and which is now printed. Signor Zannoni has excavated an entire necropolis, near the Campo Santo of Certosa. It is supposed that the ancient town Felsina had here its burying-place. No less than 365 graves have been opened with various results. A peculiar interest attaches to these discoveries, because they throw light on the life and culture of Etruria *circumpadana*, a district in which, as compared with Etruria *media*, very little has been found. From the position and state of the bodies, and character of the contents of the tombs, it must be inferred that much the same habits and much the same point of taste prevailed as in middle Etruria. Amongst the stele-shaped monuments are many with reliefs, but none with inscriptions. The style in every instance shows Greek influence. Bronzes are numerous, and so are ornaments of bronze, of silver, of ivory, of gold, &c. Relatively to these, the discoveries at Marzabotto, a small railway station south of Bologna, are unimportant (see Gozzadini's *Di un antica necropoli a Marzabotto nel Bolognese*), though at any other moment they would excite much interest.

Dr. Heinrich Schliemann reports (*Allgemeine Zeitung*, Jan. 7) his excavations on the fields of Troy as stopped by the arrival of winter, but confidently asserts that early next spring he will be in a position to demonstrate the exact position of Troy, 35 feet below the present level (!).

In November last Hans Makart publicly exhibited in his atelier paintings on which he has for some time past been engaged. They were executed on the commission of Herr Nic. Dumba, and consist of a large square ceiling-picture and a number of large and small portions of a frieze, forming together the entire decoration of a room. On three sides there are tolerably considerable spaces, broken only by occasional doors, but on the fourth a succession of windows leaves only narrow strips of wall, and these are filled with allegorical single figures. The principal composition extends itself unchecked over the ceiling. The subject is *Die Vereinigung der praktischen mit den idealen Mächten des Lebens*. Agriculture and Industry, Art and Music, are brought before us by a vast number of figures, genii, and demigods, conceived partly in an allegoric, partly in a realistic sense. These are intermixed with all the sense-ensnaring decorative accompaniments special to Makart's genius. Festoons and fruits, costly vessels, and all sorts of beasts, are introduced in wild and various interchange. We are told that many of the subordinate incidents are very happy ; for instance, a dance of children round a fruit-tree, the counting-house studies of the genius of trade, and a scene in the studio of a little portrait painter. But, however brilliant may be the display in this new work of an enviable wealth of individual types, and magnificence of colour *bravura*, there is no advance in the

qualities of sound drawing and modelling, or in refinement of artistic style. This is what the uncompromising admirers of Makart have announced to us from year to year, but as yet no trace of such an advance can be perceived.

The auction Gsell will take place in Vienna on March 15. The exhibition of the works about to come into the market is already going on. The catalogue, which is not yet complete, will contain from fifty to sixty illustrations. The gallery contains many pictures of the first rank, both by ancient and modern masters. For example, Franz Hals, Rembrandt, Metzu, Ruysdael, Cuyp, Teniers, v. d. Meer von Haarlem, Veronese, Tintoret, Tiepolo, Cranach, may be cited amongst the ancient; and the modern are represented by Waldmüller, Pettenkofen, Troyon, Meissonier, Decamps, Couture, and others. The collection of prints and etchings has a great répute; and, finally, there are numerous precious objects and antiques.

New Books.

- ADLER, F. Das Pantheon zu Rom. Gedruckt auf Kosten der archaeol. Gesellsch. Berlin : Besser'sche Buchhg.
- BEHN, Mrs. Aphra. Plays, Histories, and Novels of the Ingenious. 1724-35. Small paper. 6 vols. (2l. 12s. 6d. and 4l. 4s.) Pearson.
- BURNS, R. The Original MS. of Tam o' Shanter and The Lament of Mary Queen of Scots. Reproduced by the Photo-chromo-lith. Process. With an Introduction by Moy Thomas, and a Glossary. Adams and Francis.
- EASTLAKE, C. L. History of the Gothic and Medieval Revival in England. Longmans.
- FERRAZZI, G. J. Enciclopedia Dantesca. Vol. IV. Bibliografia. Venezia : Münster.
- MARTIN, H. Études d'Archéologie celtique. Notes de voyages dans les pays celtiques et scandinaves. Paris : Didier.
- PETZHOLDT, J. Bibliographia Dantea ab anno MDCCCLXV inchoata. Accedit Conspectus Tabularum Dio. Com. vel stilo vel calamo vel penicillo adhibitis illustrantium. Dresda : Sump. Schönfeld.
- SCHULZE, E. Beschreibung der Vasensammlung des Freiherrn Ferdinand von Leesen. Teubner.
- TAINÉ, H. History of English Literature. Vol. II. Translated by H. van Laun. Edmonston and Douglas.

Philosophy and Physical Science.

The Works of George Berkeley, D.D., formerly Bishop of Cloyne : including many of his Writings hitherto unpublished. With Prefaces, Annotations, his Life and Letters, and an Account of his Philosophy. By Alexander Campbell Fraser, M.A., Professor of Logic and Metaphysics in the University of Edinburgh. 4 vols. Oxford : Clarendon Press, 1871.

THE merits of Professor Fraser's edition of Berkeley have been so generally recognised that in the present article, which from causes that could not be prevented is too late in its appearance, it is needless to notice them in detail. The only fault that we have to find with him is that he has in a certain sense over-edited his author, and tends to make him mean too much. In addition to valuable analyses and explanations prefixed to the several treatises, Professor Fraser accompanies them with a running criticism and elucidation at the foot of the page, and finally, in the volume containing Berkeley's life and letters, writes a general essay on his philosophy and on "his function" in relation specially to Hume and Kant. It is in this essay chiefly that he seems to us to carry too far the interpreter's licence of unfolding what his author "would have said," and partly by translating him into the language of later philosophy, partly by reading his earlier treatises in the light of certain flashes of Platonism that appear in the *Siris*, to obscure the edges of the very definite, though not far-reaching, theory which Berkeley completed in his youth, and which we only confuse by supplementing with the deeper, but insufficiently articulated, speculations of his later life. The limits, indeed, of Berke-

leyanism proper are very clearly pointed out by Professor Fraser himself up and down in his notes, and in attempting to state them we do not suppose ourselves to be bringing before him anything which he has not himself fully considered, but merely to be supplying a corrective to the over-estimate of Berkeley which some readers might derive from his work.

Berkeley's strength and weakness as a speculator alike lay in his practical interest. Of a strange precocity in philosophy, unparalleled probably except in the case of Schelling, he yet had not the spirit for pursuing truth to the bottom of her well. In the Commonplace Book kept during his residence at Trinity College, Dublin (now first published by Professor Fraser, and which alone would make his fourth volume worth buying), we already find his theory ready-made, only lacking the perfect literary form of the treatises which he afterwards published. The question is as to the constructive value of this theory; of its validity for the destructive purpose, for which Berkeley intended it, no one who understood it has ever doubted. He found practical irreligion and immorality excusing itself by a theory of "materialism"—a theory which made the whole conscious experience of men dependent on "unperceiving matter." This, whatever it might be, was not an object which man could love or reverence, or to which he could think of himself as accountable. Berkeley, full of devout zeal for God and man, and not without a tincture of clerical party-spirit, felt that it must be got rid of. He saw that the "new way of ideas" with which his teacher Molyneux had familiarised him had only to be made consistent with itself, and the oppressive shadow must disappear. Ideas according to that "new way" (or, to speak less ambiguously, feelings) make up our experience, and they are not matter. Let us get rid, then, of the self-contradictory assumption that they are either copies of matter—copies of that of which the sole and simple differentia is that it is not an idea—or its effects—effects of that which we can only describe as the unknown opposite of the only efficient power with which we are acquainted—and what becomes of the philosopher's blind and dead substitute for the living and seeing God?

The object was a worthy one, and doubtless Berkeley has had his share in the most obvious service which philosophers render to their kind. He has done something to save reflecting men from the bondage which comes of misinterpreting formal ideas; but, as we think, not quite so much as Professor Fraser would have us believe. He took—as might be expected of a philosopher whose latest systematic treatise was published when he was 28—too short a cut to his end. He worked merely with the means which Locke put into his hands, and thus, while his destructive method was invincible, his untempered mortar would not really hold together the fabric of knowledge and rational religion which he sought to maintain.

It is true that his polemic, according to his own intention, was directed not against the supposition of the reality of substance *as such*, but against its reality as the antithesis of mind, or, in the language of the time, against "unthinking substance"—"body" or "matter." To show the untenability of such a supposition upon the principles of Locke was not difficult. The question is whether upon those principles anything survives but the succession of feelings severally "real" only in the moments of their presence to consciousness and as manifold in their diversity as are those moments; and whether Berkeley has any new principles to substitute for those of his master. If these questions are answered in the negative, it will follow that the title, which Professor Fraser (though with much abatement) seems to claim for him, of having in some sort anticipated

Kant, is not fairly earned ; that in result, though not in intention, he merely did imperfectly what Hume did perfectly ; that his polemic is valid not against "unthinking" substance and causality merely, but against substance and causality altogether ; not merely against the reality of "outwardness" to the mind, but against the reality of outwardness as an intelligible relation between bodies ; and that thus finally, to say nothing of its bearing on the belief in God and immortality which it was meant to uphold, his doctrine, fairly carried out, rendered the knowledge of nature no less than mathematical knowledge an unaccountable fiction.

It scarcely needs to be said that the governing notion of Locke's philosophy had been that of the antithesis between "facts" and "things of the mind"; and a moment's consideration will show the difficulties which this antithesis has in store for a philosophy which yet admits that it is only in the mind or in relation to consciousness—in one word, as "ideas"—that facts are to be found at all, while by the "mind" it understands an abstract generalisation from the many minds which severally are born and grow, sleep and wake, with each of us. The antithesis itself, like every other form in which the impulse after true knowledge finds expression, implies a distinction between the seeming and the real ; or between that which exists for the consciousness of the individual and that which really exists. But outside itself consciousness cannot get. It is there that the real must at any rate manifest itself, if it is to be found at all. Yet the original antithesis between the mind and its unknown opposite still prevails, and in consequence that alone which, though indeed in the mind, is yet given to it by no act of its own is held to represent the real. This is the notion which dominates Locke. He strips from the formed content of consciousness all that the mind seems to have done for itself, and the abstract residuum, that of which the individual cannot help being conscious at each moment of his existence, is or "reports" the real, in opposition to the mind's creation. This is feeling ; or, more strictly, it is the multitude of single feelings, "each perishing the moment it begins," from which all the definiteness that comes of the mind's own act in the way of composition and relation must be supposed absent. Thus carried out, the antithesis between fact and mental fiction becomes self-destructive. Detach all mental accretions, and there remains nothing in which one feeling differs from another but the degree of its liveliness. It is to this, as constituting the distinction of the real from the unreal, that Hume in his treatise on Human Nature finally comes, and Berkeley himself was quite aware that his erasure of Locke's inconsistencies left him no criterion of reality external to the feeling itself. The essential distinction between his result and Hume's reduces itself to this, that whereas with Hume that which in the language of later philosophy is called "objective order" becomes an unaccountable fiction of thought, and reality becomes merely a name for the liveliness (of indefinite degree) with which one feeling, if itself lively, recalls another ; with Berkeley, on the other hand, reality means an order of sensations in a divine consciousness to which their succession in us, according as they are vivid and coherent or the reverse, does or does not correspond. It is this divine consciousness which with him takes the place which "qualities of matter" or "nature" held with Locke, as that which our ideas, if real and adequate, represent.

To have demonstrated such direct dependence of human experience upon God, Berkeley reckoned his great service to mankind, by which he had silenced the atheists for ever. The value of the service to his own generation is not in question. Each generation requires practically to be delivered from the "bondage of matter" according to the

philosophical method with which it is familiar. But in order to estimate its value as a permanent contribution to speculative theism, we must ask two questions. Taking the three steps of Berkeley's short and easy method—sensible things are merely sensations, sensations imply a sentient subject, this subject must be one whose consciousness is absolutely permanent and continuous, i.e. God—is not the process, by which the first step is established, itself fatal to the third ? And supposing this difficulty to be got over, is not the one subject, whose being is proven, simply the *μέγα ζων* of the crudest form of pantheism rather than the Christian God ? To the first of these questions the answer must ultimately depend on the meaning to be attached to the "percipi" with which Berkeley identified the "esse"—a meaning which Professor Fraser in several places (e.g. on pages 373 and 387 of vol. iv.) seems to us unwarrantably to extend. From the introduction and earlier sections of the *Principles of Human Knowledge* it is quite clear that the "percipi" with him primarily meant present feeling and no more. A thing *is*; that is, I now feel : it *was* ; that is, I did feel. This doctrine can legitimately lead to no result but Hume's. It is fatal alike to the reality and knowability of permanent subjects or "spirits," as much as of bodies and their relations. There is evidence from the Commonplace Book that Berkeley had at least an occasional forecast of this result, and in his published treatises we no doubt find him feeling his way towards a different account of the "percipi" according to the exigencies of his theistic theory. Thus we find him in section 89 of the *Principles of Human Knowledge* quietly introducing "spirits and relations" as being no less than "ideas," objects of human knowledge, in virtual contradiction of the opening section of the same treatise. But no trace appears of any such account of the "percipi," into which "esse" is resolved, as would justify us in interpreting it as the "intelligi." "Spirits and relations" are brought within the region of knowable reality when they are wanted, but there is no reasoned vindication of their position, and at so late a period in his life as the publication of the *Analyst* we find Berkeley reverting to his original sensationalism for a weapon against the mathematicians. The imaginary "real" outside consciousness he had effectively disposed of, but for any effective replacement of it by an intelligible and necessary element within consciousness we search his pages in vain. For his theistic purpose he had proved either too much or too little. The latter part of the *Siris* is mainly of interest as showing that the theistic instinct (if we may say so) survived his system, and was feeling after a philosophical apparatus wholly different from his original one. Such a statement as that "the principles of science are objects neither of sense nor imagination ; intellect and reason being alone the sure guides to truth," is wholly irreconcilable with the doctrine of his earlier treatises. The worst of it is that, while it is merely "shot from a pistol," the earlier doctrine is fully worked out, and can alone be fairly treated as the Berkeleyan system. Professor Fraser is quite aware of the distinction, but in "developing Berkeley's thought" he seeks to introduce a consistency which we think unreal between his earlier and his later mind, and in so doing detracts from the "propædeutic" value of the study of Berkeley, which is in brief that it shows the necessity of Kant.

T. H. GREEN.

Intelligence and Notes.

Zoology.

Embryology of Arthropoda.—Dr. Dohrn's *Untersuchungen über Bau und Entwicklung der Arthropoden* (parts 1 and 2) attempts to follow out the line of genealogical investigation which is an offshoot of the

Darwinian theory, and has been so brilliantly initiated by Fritz Müller in his essay, *Für Darwin*. Furnished with the maxim, that "the ontogenetical development is a short and incomplete representation of the phylogenetical development," Dr. Dohrn reviews the embryology of the different classes and families of the Arthropoda, to ascertain where they agree and where they differ. Thus he has examined the embryology of the Cumaceæ, the Pycnogonideæ, Praniga, Tanaïs, Palinurus, and Scyllarus, Limulus and some other Crustacea, of which he gives a detailed account, accompanied by numerous illustrations. Amongst these monographs those on the Pycnogonum, Palinurus, and Limulus are especially remarkable. As regards Pycnogonum, Dr. Dohrn states that the greater part of the family undergo an extensive metamorphosis; and he proves that the so-called "palpi" and "female feet" are both typical pairs of appendages, which are sometimes wanting in the adult, but are always developed in the larva. The number of these typical appendages being thus fourteen, Dr. Dohrn adduces it as a strong argument against those zoologists who, like Gerstäcker and others, place the Pycnogonideæ amongst the Arachnidæ on account of some superficial similarities of the adult. Dohrn adds to his account the description of the development of Phoxidilidium, which differs in a remarkable way from the other Pycnogonideæ, as there occurs no larval condition whatever. Instead of it there is a larval skin, representing the lost larval form. This larval form he refers to Nauplius. With regard to Palinurus and Scyllarus, Dohrn proves that in spite of Professor Claus and Mr. Spence Bate's doubts, Phyllosoma is the true larval form of these Macrura. He succeeded, by applying a constant stream of sea-water running over the eggs of both the Crustacea, to breed and hatch them. The larval forms produced were Phyllosoma. Limulus has received much attention of late in connection with the alleged discovery of a trilobite with legs. Mr. Billings in Canada and Mr. Woodward in England, as well as Mr. Cope and Mr. Packard in America, have put forth opinions about these animals, and they seem to agree in grouping the Trilobites together with the Isopoda, and in excluding Pterygotus as well as Limulus from the Trilobites.* Dr. Dohrn treats these questions in an elaborate article in the *Jenaische Zeitschrift für Medicin und Naturwissenschaft*, a periodical known as being the organ of German Darwinism, receiving its contributions from Gegenbaur, Haeckel, Fritz Müller, Wilhelm Müller, and others of the Jena school. Dr. Dohrn arrives at the conclusion that Limulus, Pterygotus, and the Trilobites ought to form one great family, whose connection with the other Crustaceans is still doubtful. He refuses to admit any connection of Limulus with the Isopoda, as suggested by Mr. Woodward and Professor Huxley. The same periodical contains the first part of a memoir, by the same zoologist, entitled, "History of the Crustacean Tribe, based on Anatomical, Embryological, and Palaeontological Facts." Dr. Dohrn here endeavours to give the outlines of the history of the crustacean tribe, beginning from the Nauplius, and tracing the diverging lines to the different crustacean families. As regards Insects, Dr. Dohrn only gives some hints in the preface of his second part. He says that he took up the subject of insect embryology at the same time with the Crustaceans, but he soon arrived at important discoveries bearing upon the old problem of the homology between Arthropoda and Vertebrata. We shall probably have to wait for the result of these researches till Dr. Dohrn has finished building the zoological station at Naples, with which he is at present almost exclusively occupied.

Micrococcus in Measles and Scarlet Fever.—An important paper, if the facts stated in it be corroborated by other and independent research, is contained in the last part of Hallier's *Zeitschrift für Parasitenkunde* (Band iii. Heft 2), written by Dr. Hofmann. This practitioner treats measles and scarlet fever by the hydropathic method, that namely of enveloping the patient with due precaution in wet linen cloths, and thus promoting a free perspiration, which lowers the temperature of the body and quickly cures the disease. Hallier and others maintain that these diseases are occasioned by the presence and development of certain fungi in the blood, which they state can be seen in it by the microscope in the form of minute cell-like bodies or spores, the so-called micrococcus. It occurred to M. Hofmann to collect the perspiration obtained from the patients enveloped in the wet bandages, and to send it to M. Hallier with a request that he would examine it for the micrococcus. M. Hallier replied that micrococcus was abundant, and at once proceeded to institute experiments with a view of determining whether the specific disease could be propagated by inoculation or other means. The results of their researches have not yet been published, but if successful, they will go far to show that these affections are really due to the presence of a fungus in the blood, for when it is present the disease exists, and when removed it ceases, whilst the fluid excreted from the skin of the sick, and known to contain the fungus, is capable of generating disease in the healthy.

* Mr. Woodward has carefully reviewed Dr. Dohrn's investigations in a paper communicated to the Geological Society on December 20, 1871, entitled "Further Remarks on the Relationship of the Xiphosura to the Eurypterida and to the Trilobita," in which he maintains that these orders should be still retained in the class Crustacea.

Inland Locality for Marine Insects.—At a recent meeting of the Norfolk and Norwich Naturalists' Society, Mr. Barrett read some further notes on the coast-insects found at Brandon, which he considered confirmatory of the opinion expressed by him in a former paper, that these species have occupied this district, now far inland, from the time when it was part of the sea-coast. Amongst other coast-species mentioned by Mr. Barrett was *Agrostis Tritici*, and of this species he remarked that, although it occurs sparingly in inland heaths, all the specimens are of a dull brown colour, while those found on the sea-coast are generally distinctly marked and richly coloured; all those taken by him at Brandon had precisely the deep style of colour and markings which characterize it on the sea-coast. *Agrostis cursoria*, although very abundant on the sea-coast, is not to be found at Brandon; and this Mr. Barrett considers a very strong proof that the other strictly littoral species enumerated have not reached their present situation by migrating across the intervening land from the present sea-coast. This species he thinks it not improbable was an immigrant from the eastward at a comparatively recent date, and that it has attained its greatest abundance on the spots where it first obtained a footing. It would not, therefore, have been an inhabitant of this portion of the post-glacial coast.

Application of Photography to Illustrations of Natural History.—Hitherto memoirs on natural history have been but seldom illustrated by the aid of photography (for instance, a memoir on fossil rhinoceroses by Dr. Kaup), the want of permanence of the common photographic prints having made them mere auxiliaries to lithography. Prof. Alexander Agassiz proposes now to apply the new Woodbury and Albert processes of carbon-printing to the illustrations of his forthcoming *Revision of the Echini*. There can be no doubt that photography offers the great advantages of rapidity of production and cheapness, but we doubt whether it will replace lithography to any great extent. Its use will be limited to rigid objects; and even then it will not always satisfy the demands of scientific enquiry. In numerous cases, as, for instance, in faint and incomplete traces on a fossil, or in anatomical preparations, we have to give the outlines of certain structures greater distinctness than they have in nature, in order to render important characters more apparent. When we examine the specimen of photographic printing (of *Echinocardis punctulata*) issued by Professor Agassiz, we cannot help thinking that a skilful lithographer would have produced a drawing quite as accurate and faithful to nature, and certainly with the sculpture much more clearly delineated. However, it is satisfactory to see this method put to the test, and we wish every success to this highly important undertaking of Professor Agassiz.

Observations on Parthenogenesis.—A most important article, entitled *Quelques Observations de Parthenogénèse chez les Lépidoptères*, has been published by H. Weijenbergh in *Archives néerlandaises*, vol. v. pp. 258-264. In August 1866 the author found a male and female of *Liparis dispar* in the act of fecundation, and obtained some 500 eggs, from which, in the year following, the caterpillars were reared. The perfect insects appeared in July. Every precaution was taken to keep the two sexes separate: this was easily effected, as they could be distinguished in the larval state. Of about sixty females two-thirds laid eggs without fecundation; but the number of eggs was much smaller than under normal conditions, none of the females depositing more than twenty. The author obtained altogether about 400 unimpregnated eggs, but only some fifty caterpillars were reared from them. In due time they passed through the metamorphosis, the number of females being fourteen. Strange to say, these virgin insects, born of virgin mothers, deposited again a number of eggs, from which again caterpillars were reared in April 1869, and perfect butterflies in July. Their eggs, however, appear not to have preserved vitality, having been found dried up in the spring of 1870. Thus, after the normal impregnation of a female, eggs were laid by three successive generations without fecundation. As far as is known at present, this extraordinary power of reproduction is possessed by a comparatively small number of insects, the subject having been best studied in the common bee and in Aphides.

On the Period of Sexual Differentiation in the Ova of Insects.—Siebold and Bessel had proved that in Insects the differentiation of the sex takes place in impregnated eggs before the larvae are hatched. In a highly interesting paper published in the 48. *Jahresbericht der Schlesischen Gesellschaft f. vaterländ. Cultur* (Breslau, 1871), p. 143, Dr. Gustav Joseph shows that the sexes are differentiated before the ova have come in contact with the *sperma virile*. He observed that with a little practice two different forms of ova can be distinguished in *Liparis dispar*, *Orgyia gonostigma* and *antiqua*. The ova of the one form are comparatively thicker, with the greatest transverse diameter nearly in the middle of the egg, and with the opposite poles scarcely differing in shape; these ova of this kind are less numerous than the other, and invariably contain females. Those of the latter form are comparatively slender, with the greatest diameter nearer to the upper pole, which is more obtuse than the lower; as has been stated, they constitute the majority, and male insects are hatched from them. Now, as these two kinds of ova are found in the oviducts of females reared from

caterpillars and kept apart from males, it is evident that the differentiation of the sexes is independent of the *sperma virile*, which has simply a vivifying function, and is even not absolutely necessary for the reproduction of life in insects endowed with the power of parthenogenesis.

Ceratodus.—Dr. Günther's *Description of Ceratodus, a Genus of Ganoid Fishes recently discovered in Rivers of Queensland, Australia*, has been issued. This paper contains a description of the whole anatomy with the exception of the nervous and circulatory systems, which will form the subject of a separate memoir. The author proves the close affinity of this fish to Lepidosiren and Dipterus (and, consequently, also to Ctenodus), and arrives at the conclusion that the ganoid and cartilaginous fishes should be united into a separate subclass, Palaeichthyes, which approaches the batrachian type in many important parts of its organization. Thanks to the liberality of the Royal Society, the paper is illustrated by thirteen plates executed by Mr. G. H. Ford.

Passat-dust and Blood-showers.—Professor Ehrenberg, who has published from time to time the results of his examination of those microscopic bodies that are carried by the atmosphere and deposited either as passat-dust or as substances of a red colour, has collected all the observations on this subject made by him between the years 1847 and 1870. This important memoir, consisting of 150 pages, two tables, and two plates, will appear in the forthcoming volume of the *Transactions of the Berlin Academy* for 1871. He enumerates all the instances of these phenomena which have been placed on record; the earliest being a case of a dust-shower which fell for ten days in the Chinese province Honan, in the year 1154 B.C. As his examination was directed chiefly to organisms contained in the dust, the analysis was entirely microscopical, not chemical. The number of analyses made by himself is altogether seventy, and he was able to distinguish not less than 460 distinct forms of organic life, among which were 194 Polygastra, 145 Phytolitharia, and 25 Polythalamia.

King-Crabs and Trilobites.—Professor E. van Beneden (*Compt. rend. Soc. Entomol. Belg.* October 14, 1871) has studied the embryonic development of *Limulus polyphemus*, and has come to the conclusion—1. That the Limuli are not Crustaceans, as none of the characteristic phases of the development of Crustacea can be distinguished; and that, on the other hand, their development shows the closest resemblance to that of the Scorpions and other Arachnids. 2. That the affinity between the Limuli and Trilobites cannot be doubted, and that the analogy between them is the greater in proportion as we examine them at a less advanced period of their development. 3. That the Trilobites as well as the Eurypterida and Pectinopoda must be separated from the class Crustacea, and form, with the Arachnids, a distinct division.

The Collection of Snakes in the British Museum.—From a statement made by Dr. Günther, in the January number of the *Annals and Magazine of Natural History*, it would appear that the national collection, which in the year 1858 contained 480 species of Snakes represented by 3990 examples, possesses now 920 species represented by 5500 examples. The number of typical specimens is 366, the total number of species of Snakes known at present being calculated at about 1100.

The *Videnskabelige Meddelelser fra den naturhistoriske Forening i Kjøbenhavn* for 1871 (Nos. 1–10) contain only two zoological papers:—1. A contribution to the life-history of the Frogs and Toads of Denmark, by J. Sahlertz; and 2. Revised list of the Echinoderms inhabiting the coasts of Denmark, with information regarding their distribution on the Danish coasts, by Chr. Lütken.

The forty-eighth annual report of the *Schlesischen Gesellschaft für vaterländische Cultur* (Breslau, 1871) contains, beside notes on the skull of *Galeopithecus volans* by Prof. Grube, the following zoological papers:—On new species of the genus *Sabella*, by Prof. Grube; on the Amphicteneæ and Ampharetæ, by the same; on two new forms of Heteronereis and Pycnogonidæ, by the same. The report of the entomological section of the society contains some important papers, viz. by Dr. Gustav Joseph: on the time of sexual differentiation in the ova of certain species of Liparis; on dimorphism of the female of *Dytiscus dimidiatus* (Bergstr.), and on the group of species allied to *Dytiscus marginalis*; on the morphology and biology of *Glyptomerus cavicola*, a blind beetle inhabiting caves; on eyeless Arthropods in Silesia. By Hr. Letzner: Contribution to the knowledge of *Trogosita mauritanica* (L.). By Eug. Schwartz: Diagnoses of certain species of Cryptoccephalus.

We hear that Mr. E. L. Layard, the well-known zoologist and author of *The Birds of the Cape Colony*, has been appointed H. B. M. Consul at Para. However satisfactory this appointment may be to Mr. Layard, it would have given us greater pleasure if a man of such scientific attainments had been located in a district whose fauna is less perfectly known than that of Para.

Botany.

Dispersion of Seeds by the Wind.—A Kerner, of Innsbruck, reprints a very interesting paper on this subject, from the *Zeitschrift*

des Deutschen Alpenvereins. In order to ascertain the extent to which seeds are carried by currents of air, the author made a careful investigation of the flora of the glacier-moraines, and of the seeds found on the surface of the glaciers themselves, believing that these must indicate accurately the species whose seeds are dispersed by the agency of the wind. Of the former description he was able to identify, on five different moraines, 124 species of plants; and a careful examination of the substances gathered from the surface of the glacier showed seeds belonging to thirty-six species which could be recognised with certainty. The two lists agreed entirely in general character, and to a considerable extent also specifically, belonging, with scarcely an exception, to plants found on the declivities and mountain valleys in the immediate vicinity of the glacier—scarcely in a single instance even to inhabitants of the more southern Alps. M. Kerner's conclusion is that the distance to which seeds can be carried by the wind, even when provided with special apparatus for floating in the air, has generally been greatly overestimated; and this is very much in accordance with the view advanced by Mr. Bentham, in his anniversary address to the Linnean Society in 1869. Along with the seeds M. Kerner found, on the surface of the glacier, more or less perfect remains of a number of insects belonging to the orders Lepidoptera, Diptera, Hymenoptera, and Coleoptera, which, like the seeds, belonged almost exclusively to species which abound in the immediate neighbourhood of the glaciers. The species of plants which are especially inhabitants of the higher mountain regions may be divided into two classes. In the first the seed or fruit is provided with an appendage of various kinds, to enable it to be carried easily by the wind; the species possess generally a short space of life, are continually shifting their habitat, will grow where there is scarcely any soil, and especially love to establish themselves in the clefts or on the inaccessible sides of rocks; their floating apparatus appears designed rather to enable them to reach these habitats, where no other plants could establish themselves, than to be carried any great distance by the wind. The second kind are much more stationary, have a greater length of life, require a richer soil, are unprovided with any apparatus for flight, and can advance only very gradually; they are consequently much less abundant than the first kind. From the above observations, and the fact of the existence of detached localities for some of the mountain species in the Tyrolese Alps, very remote from their more abundant habitats farther south, M. Kerner draws the conclusion that at a period subsequent to the glacial epoch a warmer climate than the present overspread that part of Europe, when the species referred to extended over a wide area, of which the present isolated localities are the remains.

Mimicry in Plants.—In the January number of the *Popular Science Review*, Mr. A. W. Bennett brings forward some remarkable illustrations of this singular class of phenomena, which he divides under two heads—those which relate to the whole habit and mode of growth, and those which refer to the development of some particular organ or part. Of the former kind a very familiar instance occurs in the extraordinary resemblance between the succulent plants which form so prominent a feature of the flora of the sandy deserts of America and Africa, belonging to the widely dissociated genera *Cactus*, *Euphorbia*, and *Stapelia*; and instances of this kind the writer thinks may generally be accounted for by similarity of external conditions. Far more difficult is it to explain the cases of "mimicry" which come under the second head, in which species growing either in the same or in different localities imitate one another to a marvellous degree of closeness in the form and venation of the leaf, the external appearance of the seed-vessel, or in some other particular organ. It appears impossible to suggest any explanation of this phenomenon like that which has been brought forward in the case of similar close resemblances in the animal kingdom, viz. "protective resemblance," springing up by the operation of natural selection; and these singular facts seem to deserve closer attention than they have yet received.

New Fossil Conifers.—Mr. W. Carruthers has figured and described in the number of the *Geological Magazine* for December 1871 two new species of fossil coniferous fruits from the Gault beds of Folkestone. He states one species to be allied to the existing *Wellingtonia*, and shows that they point to the existence of a coniferous vegetation on the high lands of the Upper Cretaceous period, which had a *facies* similar to that now existing on the mountains in the west of North America between the thirtieth and fortieth parallel of latitude. No fossil referable to *Sequoia* (or *Wellingtonia*) has hitherto been found in strata older than the Gault, and here, on the first appearance of the genus, we find it associated with pines of the same group that now flourish by its side in the New World.

New Publications.

BÜCHNER, P. T. *Lehrbuch der anorganischen Chemie*. 2. Abtheilung. Brunswick : Vieweg and Son.
GOEBEL, K. *Ueber Kepler's astronomische Anschauungen*. Halle : Buchhandlung des Waisenhauses.

- KOLBE, H. *Moden der modernen Chemie.* Leipzig : Barth.
 LEY, W. C. *Laws of the Winds prevailing in Western Europe.* Stamford.
 MAXWELL, J. C. *Theory of Heat.* Longmans.
 MOLESCHOTT, J. *Untersuchungen zur Naturlehre d. Menschen u. der Thiere.* II. Bd. I. Hft. Giessen : Roth.
 OTTO, R. *Graham-Otto's Lehrbuch der Chemie.* 4. Auflage. II. Band, 2. Abtheilung, II. Lieferung. Brunswick : Vieweg.
 PFLEIFFER, L. *Nomenclator Botanicus, ad finem 1858.* Vol. I. Fasc. I. Cassellis : Sumpf. Fischer.
 SCHAUFUSS, L. *Nunquam Otiosus : Zoologische Mittheilungen.* Zugl. Organ der Gesellsch. für Botanik und Zoologie zu Dresden. I. Band. Dresden : Adler.
 SCHELLEN'S *Spectrum Analysis.* Translated from the second German edition by J. and C. Lassell. Edited by W. Huggins. Longmans.
 TODHUNTER, J. *Researches in the Calculus of Variations.* [The Adams Prize Essay, 1871.] Macmillan.
 ZOOLOGICAL RECORD for 1870. Edited by A. Newton. Van Voorst.

History.

Correspondances intimes de l'Empereur Joseph II avec son Ami, le Comte de Cobenzl, et son premier Ministre, le Prince de Kaunitz. Par Sébastien Brunner. Mayence : Kirchheim.

M. BRUNNER, the previous editor of two volumes of documents illustrating the reign of Joseph II., has now drawn from the imperial archives of Vienna a selected portion of the emperor's correspondence, the main body of which dates from 1782 up to February 1790, a few days before Joseph's death, and consequently covers the period of the residence of Pius VI. in Vienna, the emperor's visits both to Rome and to the Crimea, the Hungarian tumults, the Turkish war, and the revolt of the Netherlands. The predominant spirit of the volume—so predominant indeed that it comes out in every page, and may be said to give some effect of unity and sequence to an incomplete set of letters—presents itself to the reader at first sight. And this may be defined as an intense and narrow absolutism which led Joseph to make two factors only—his own will and the material at hand for executing it—the basis of political calculation, and at the same time to consider both nations and individuals in relation to himself to be nothing more than the pieces on a chess-board. This sentiment inspires one of the earliest despatches—that to Cobenzl, then acting as his master's plenipotentiary at the congress of Teschen—in which Joseph, describing himself as "emperor and commander-in-chief of 300,000 men," frankly designates the whole staff of the imperial government as "my tools." And, turning to a letter written at the close of his reign, eleven years afterwards, we find a passage which strikingly presents the results of this thorough-going exercise of personal rule; speaking of his illness, he says that the firmest health must have given way under the burden of such troubles as his. "My whole situation," he adds, "the retrospect of the past, the sense of the present, the foresight of the future—all this is as bitter as possible." * More than once during the intervening correspondence the self-same spirit shows itself fatal to the true statesman's keen and instinctive perception of adverse influences, as, for instance, in a letter dated at a time when the party of reaction against the Josephine reforms was gaining strong support and fresh impetus from the visit of Pius VI. to

Vienna in 1782. Joseph complacently sets forth how he contrives at once to show contempt for the pontiff's presence and to frustrate its object by forcing indifferent topics upon him during their interviews, to the exclusion of the serious matters at issue between them, and confidently prophesies that "in consequence" of this personal disrespect "the fable of the mountain and mouse will be exactly illustrated by the Holy Father's singular and pompous progress." Yet events refused to justify a prediction which, even at its utterance, was falsified through one broad fact, unnoticed by imperial egotism—the presence of Pius had stirred the heart of the people. The universal enthusiasm, the kneeling crowds, the distant populations which thronged the capital to see the face and take the blessing of their supreme spiritual ruler; all such plain tokens of that most vital danger to nascent reform—the evocation of a deep-seated and widespread popular reaction—were thrown away upon the revolutionary despot. Equal inability to estimate the sources and strength of a popular movement marks the correspondence throughout the earlier stages of the Belgian revolution. The patriots are judged as wild schemers whose plans, if not carried out on the instant, will certainly be abandoned by men shrinking at the after-thought of personal consequences; the memorial of the States of Brabant (June 30, 1787) is contemptuously mentioned; "les impertinences et la mutinerie" are the terms used for an organised national resistance, and farther on its obstinate vitality is characteristically set down to the break made in Joseph's personal government during his visit to Cherson. His letter to Kaunitz (October 4, 1787), though it takes note of one ominous sign, conveys the impression that he believed the movement dying out. A few days afterwards he wrote word to Catharine that the Belgian troubles were "coming to an end as ridiculous as their beginning." In her reply the sharp-sighted czarina hinted pretty plainly her prevision that the end was by no means so near at hand. It was to come in reality, fraught with issues at that time unlooked for by Joseph, at the close of 1789. Tidings of the first congress of the new republic, and of its negotiations with foreign powers, reached him upon his death-bed. Writing from thence to Cobenzl (January 17, 1790), he declares that all along he has had no illusions, and that the event is just what he had foreseen; "that is to say, that there is not the least hope of dealing with these people except at the head of 80,000 men."

Apart from the discussion of the Netherland affairs, the letters included in this volume, unlike those between Joseph and Kaunitz, from which M. d'Arneth has largely quoted, are provokingly brief and sterile in notices of public events. On the other hand, they fully illustrate the emperor's mode of government, especially his vehement and laborious activity in all matters, whether small or great, and throw useful light on his personal relations with his ministers. Details of espionage, a system of postal tampering, secret agency, hints suggesting petty jealousies and backstairs intrigue—these and such-like matters bring out strongly the meannesses of enlightened despotism. For Joseph himself the worst result of his personal government must have been this—that it was actually fatal to the development of bold and capable statesmen; for, as the correspondence advances, it clearly shows how the ministers whose office he had degraded to that of mere clerks of the closet—the men who were, as he says, mere "tools" and "instruments"—had in truth become such things as he accounted them, and, being such, were powerless for independent action in a state emergency. When this comes in the shape of the Belgian revolt, we see him unable to trust his advisers at home; his military and civil chief commissioners in the disturbed provinces, d'Alton and Trautmannsdorf, are

* Dated December 5, 1789. Writing on the day following to Catharine of Russia, Joseph says:—"Ma situation, l'événement malheureux qui d'une façon aussi inconcevable m'a causé la perte des Pays-Bas, l'agression qui nous attend pour le printemps de la part du Roi de Prusse, tout cela est connu à votre Majesté impériale, et elle seule, qui connaît si bien l'amour pour l'État qui nous est confié, et les sentiments de l'honneur, pourra apprécier l'amertume mortelle de ma peine."—*Joseph II. und Katherina II., ihr Briefwechsel*, d'Arneth, p. 346.

divided in action, and waste irreparable time in personal jealousies, while Count Belgiojoso's helpless incapacity in the crisis is sufficiently marked by Kaunitz (p. 135).

Records which bring out the bad points of an absolute monarchy rarely set the sovereign himself in a flattering light; and accordingly M. Brunner's fresh evidence is by no means in keeping with Gross-Hoffinger's well-known panegyrical monograph of Joseph II. Indeed, it seems to reverse the picture, and we lose sight of his really noble qualities in view of the unpleasing traits presented of cynicism, arbitrary self-will, disregard for other men's feelings, tasteless parade of contempt for individuals—in one word, of habitual and manifold neglect of Montesquieu's maxim, that no prince should permit himself to put an affront on a subject. To his veteran chancellor he writes with some show of consideration; but the letters to his friend Cobenzl make a thoroughly disagreeable impression. Not only is their general tone harsh, rude, and imperious, but their style, slovenly to the last degree, gives the finishing stroke of disrespect for the person addressed. It may fairly be said that they stand in complete and grotesque contrast to the correspondence with Catharine, remarkable for its elaborate French, and still more elaborate flatteries. The closing letters, however, bear the impress of Joseph's truer and better nature, brought out by the touchstone of suffering and adversity. And his pathetic last farewell to Kaunitz reveals the royal patriot, of whom, notwithstanding all mistakes and shortcomings, it is justly written upon his grave that "Saluti publicae vixit non diu sed totus."

GEORGE WARING.

Romanian Studies. [Romänische Studien: Untersuchungen zur älteren Geschichte Româniens. Von R. Roesler.] Leipzig: Duncker u. Humblot, 1871.

THE volume before us contains a series of researches tending to throw light on one of the obscurest points in European ethnology, the origin and early history of the Wallachian or Romanian nation—at present increasing in numbers and influence, and of no small interest owing to its close connection with the Eastern question. Not only Wallachia and Moldavia, but parts of Transylvania, Eastern Hungary, Bessarabia, and Bukovina are inhabited by a population which, although separated from all other neo-Latin nations, speaks a language which is clearly of Roman origin. This fact, in itself interesting, leads us to look for the connections which must have subsisted between the Romanians of to-day and the ancient people from whom they derive their language. From 106 to 272 A.D. Dacia, the territory now in possession of the Wallachian population, was a province of the Roman empire, and at least partly cultivated by Roman colonists. The Romanians themselves think it a point of patriotism to maintain their descent in a direct line from these colonists, whom they believe never to have quitted the soil of Dacia. This opinion has been generally adopted in Hungary and Germany. Mr. Roesler's researches have led him to a contrary conclusion: the book before us goes to prove that the forefathers of the present Romanians did not live in Dacia, but in ancient Moesia and other parts of the Hæmus peninsula, whence they migrated across the Danube to their present seats not much earlier than the thirteenth century.

The two first chapters of Mr. Roesler's book (I. The Getae; II. The Dacii) may be called introductory, and give a survey of the ante-Roman state of things in Dacia, Thracia, and the adjacent regions. The way in which Mr. Roesler tries to solve the difficult problems connected with this part of ancient ethnology will greatly interest historians. The main interest of the book, however, lies in the third chapter, which

treats of the habitation of the Romanians in the middle ages. It is certain that Dacia contained a Latin or Roman population from 106, the date of occupation, till 272, when Aurelian relinquished the province and ceded it to the then wandering Teutonic nations, Goths and others. But it is no less certain that the Roman colonists of Dacia who would otherwise have been exposed to constant attacks from the barbarians, were conducted to the southern banks of the Danube and settled in the eastern part of Moesia and the so-called Dardania, which consequently received the names of Dacia Nova, Dacia Ripensis, or simply Dacia, and, as might be expected, was not rarely mistaken for the former Dacia. Mr. Roesler thinks that the evacuation of Dacia was a complete one, as far as such a migration can be complete. Some few of the Roman colonists may have remained, but not in such numbers as to give a right to speak of a Roman population resident in Dacia after the province had been abandoned. His principal authority is Flav. Vopiscus, *v. Aurel.* 39: "cum vastatum Illyricum ac Moesiam deperditam videret, provinciam Transdanuvinam Daciā a Trajano constitutam *sublato exercitu et provincia libus* reliquit, desperans, eam posse retineri abductosque ex ea populos in Moesia collocavit appellavitque suam Daciā quae nunc duas Moesias dividit." In opposition to this statement Wallachian historians firmly assert that the major part, or at least a considerable portion, of the colonists remained in Dacia, either taking refuge in the mountainous parts of modern Transylvania, or living in some degree undisturbed among the barbarians. This assumption, though not backed by any authorities, is in itself consistent, but—and this is the strongest point of Mr. Roesler's argument—there is not a single fragment of historical evidence proving the existence of a Romanian people from the third to the thirteenth century. We look for a Romanian nation and find none, at least not there where it is supposed to have lived during that period. Yet the history of those countries, although far from being accurately known, is by no means so obliterated as to explain this marvellous fact. We know the different nations that occupied and for a time inhabited the soil of Dacia, one after the other—Vandals, Goths, Huns, &c., lastly Slavonian tribes and the Hungarians, but no mention is ever made of a Wallachian or Romanian population. Neither Constantine Porphyrogennetos, the best authority for the ethnology of the trans-Danubian countries, knows anything of them, nor are the "Vlachove" of Nestor, the Russian chronicler, the modern Wallachians, but the Franks of the Carlovingian empire. Nor when near the end of the eleventh century Transylvania became a Hungarian province are any traces to be found of the former Roman colonists supposed to have taken refuge in that country. On the contrary, the Hungarian kings thought it necessary to invite a large number of German colonists into their new province, a measure quite incomprehensible if there existed a population of Latin tongue in possession of the soil, and moreover, as Wallachian historians assert, far more advanced in civilisation than their neighbours. Further, when Bruno (about 1007) preached the Gospel in the then Petchenegian districts of modern Moldavia, he complains of the people as of the worst of heathens. "How would his heart have been gladdened if he had detected in the midst of the hostile Petchenegs a numerous Romanian population, entirely unknown to the west of Europe, a people who had shown courage enough to defend their Christianity against the heathens through many centuries." But Bruno knows of no such people, much less of an organized Christian church with priests and bishops, supposed by Wallachian authors to have been then in existence. No mention of a Romanian church is found

earlier than the fourteenth century. These arguments *ex silentio* could be considerably increased, and we think them sufficient to give Mr. Roesler a right to dispute the opinion hitherto prevalent about the origin of the modern Wallachians, and to conclude that their original seats are to be looked for elsewhere.

Besides, the positive side of the question can be as satisfactorily answered. At the present day we find a numerous Wallachian population (the so-called Zinzars, Kutzo-Wallachians or Macedo-Wallachians) south of the Danube; spread over Greece, Albania, Thessaly, Western Macedonia, and Thrace, speaking a language differing only dialectically from the Wallachian tongue of Wallachia properly so called. The population can be traced back as far as the sixth century. The name of Βλάχοι is for the first time found in Georg. Cedrenus (976) to denote the modern Macedo-Wallachians. Benjamin of Tudela found a Wallachian population in Thessaly. The second Bulgarian empire (1186) was founded by Wallachians and Bulgarians in common. "These Wallachians were the remnants of the former Roman population in Moesia, combined with those Roman colonists who, emigrating from Dacia, had inhabited the cis-Danubian territories before mentioned since the third century."

The result of these researches is: that from the sixth century up to the present day there is no lack of evidence to prove the existence of a people speaking a Latin tongue south of the Danube, while no authority can be cited to prove the existence of the same people north of this river. Everybody would be inclined to draw the conclusion that the Romanian population now resident in Wallachia, Transylvania, &c. came from the other side of the Danube. To make this conclusion a certainty, the strongest factor remains to be mentioned—the Romanian language. If the ancient colonists of Dacia had remained in uninterrupted possession of the soil, their language must necessarily show some traces of the many idioms that have passed over the same soil. But the modern Wallachian tongue of the Danubian Principalities contains no German (Gothic) words, while expressions borrowed from the Hungarian are comparatively few and modern. On the other hand, the language is full of Greek and Slavonic elements. How could a considerable number of Greek words invade a language spoken in Dacia?—a fact easily to be explained if the people formerly inhabited the Hæmus peninsula. Of still greater importance is the Slavonic part of the Wallachian vocabulary. The Wallachians are now in contact only with the Russian (Ruthenian) population of Hungary, Bukovina, and south-western Russia, and are separated from the Bulgarians by the Danube. But the above-mentioned Slavonic elements bear marks of a Bulgarian, not of a Russian origin. Until the seventeenth century, the Bulgarian language was the only one used by government and the church. We think it evident that all this can only be explained by adopting Mr. Roesler's theory.

We have dwelt somewhat at length on this third chapter, believing it to be the most interesting, and to contain the most striking evidence, and must treat the remaining chapters in a cursory way. The fourth chapter is intended to destroy the authority of the so-called Anonymous Notary of King Bela, constantly cited by Wallachian and Hungarian authors as a trustworthy witness to their earlier history. Mr. Roesler has added to the doubts which have often been urged against the veracity and trustworthiness of this chronicler; and we think it very improbable that any serious historian, not blinded by exaggerated patriotism, will accept the accounts of the Anonymous Notary when unsupported by other authorities. The fifth chapter treats of the ethnological

position of the Bulgarians, which we pass over as not closely connected with the main question. Chapter vi. (The Earlier History of the Wallachian Voivodship) and vii. (The Commencement of Moldavian History) may be called a continuation of the third chapter. The author tries to disentangle the history of the two countries from the fictions of old and recent Romanian historians, who have endeavoured to fill up the void between the third and thirteenth centuries with inventions of their own. A longer article would be necessary to give the reader an idea of the minute detail connected with these researches, and we must be content to remark that the same considerateness of judgment and a strictly historical method which pervades the whole volume make the views of Mr. Roesler in the highest degree acceptable, even to those who cannot follow him in comparing the original documents, if they deserve that name, of Wallachian history. Undoubtedly, Mr. Roesler's book will contribute not a little to clear and rectify the views both of historians and of the public at large concerning the Wallachian people.

One thing we may be allowed to add. It is to be expected that Romanian writers will be very indignant at the results of Mr. Roesler's researches. But they may be consoled. If it must be denied that the modern Wallachians are the direct descendants of the ancient Roman colonists of Dacia, still another fact is undeniable: they are a people surpassing their neighbours in fecundity and power of assimilation, who have attained their present number of seven or eight millions in a comparatively short period, and spread its population by colonising and Romanising to a marvellous extent. In such circumstances exalted patriotism may wish for a noble descent and a glorious history, but such are certainly of little value in the present and future development of the nation.

A. LESKIEU.

ÉCOLE LIBRE DES SCIENCES POLITIQUES.

THE want of systematic instruction in the various branches of political science is one of the most serious defects in the higher education of France as it is in that of our own country. The existing courses on political economy and law lose much of their value by being dispersed over a number of centres, such as the École de Droit, the Collège de France, the Conservatoire des Arts et Métiers, the École des Chartes, &c., besides being deficient in many important subjects, and treating the rest in a piecemeal and arbitrary manner. To supply a new want which seems to have sprung up since the war, a number of publicists and others have combined to deliver in Paris, under the auspices of MM. Boutmy and Vinet, a systematic two-year course, beginning in the present month. The complete programme embraces ten subjects:—1. Geography and Ethnography. 2. Diplomatic History of Europe since the Peace of Westphalia. 3. Military History of Europe since Frederick the Great. 4. History of Political Economy since Adam Smith. 5. History of the Progress of Agriculture, Industry, and Commerce in Europe and America during the present century. 6. Financial History of Europe since the French Revolution. 7. Constitutional History of Europe and America since 1776. 8. History of European and American Legislation since the Civil Code. 9. History of Administration in Europe since the seventeenth century. 10. Moral and Social History since 1789.

Under the last head it is proposed to give something like an account of political theory, without which—and we may add a systematic examination of the structure and functions of the social organism, in the light of biological and psychological science—no course can be complete.

Among the professors who will commence at once are—MM. Gaidoz, Sorel, Dunoyer, Levasseur, Janet, and Leroy-Beaulieu. The students who desire a diploma at the end of their two-year course may present *theses* to be examined by MM. Passy, Franck, and Laboulaye.

Nothing can be more important than such an enterprise as this if efficiently and *strictly* carried out in a scientific spirit.

EDITOR.

Intelligence.

Prof. Wilkins, of Owens College, has published a Cambridge prize-essay on *Phoenicia and Israel* (Hodder and Stoughton), "which aims at gathering into a focus the scattered rays of light that we have from many quarters upon one of the most powerful influences that tended to mould the character of the Chosen People" (p. x.). The book is written in a clear and flowing style, and usefully supplies a gap in our historical literature. Its grand defect is that it is based on authorities which, however eminent, are now in many respects antiquated, or at any rate stand in need of a searching sceptical criticism. Something better was needed for a worthy treatment of the subject than a superficial *résumé*, acceptable as even this will be to many readers, of Movers, Ewald, Renan (not Réan), and Lenormant; and it shows a surprising ignorance of the difference between the prophetic and the historic Scriptures to describe every attempt to restore the order of the former as "confident dogmatism" (p. 165).

Dr. Kiepert's new map of Epirus and Thessaly (price five shillings) has received well-deserved praise for its severely critical treatment of heterogeneous materials, ranging from the surveys of French engineers to sketches illustrative of the routes of travellers. The same able chartographer has brought out a new map of European Turkey (price nine shillings).

Contents of the Journals.

Bullettino dell' Instituto (Nov.) continues the account of the excavations in and about the Basilica Julia, and of those at Pompeii. One of the frescoes at Pompeii depicts the mission of Niptolemus, and the first sowing of corn.

Revue Archéologique (Nov.) gives "Amphiarus" as a specimen article of the new *Dictionnaire archéologique* in preparation by Hachette and Co., the special characteristic of which is the very full employment of monuments, vases, &c., in illustration of the statements made by ancient authors.—An article on Philo's Contemplative Life goes over much the same ground as De Quincey's article on the Essenes, but comes to an opposite conclusion.—Three new inscriptions from Thera afford instances of the *heroia* so commonly dedicated by the leading families. The tombs in the necropolis of Marzabotto, in the Apennines, on the road from Bologna to Pistoia, are shown to contain some Gaulish relics mixed up with the Etruscan, the type being that of North Gaul. Did they belong to the Serones who immigrated into this district?—De Sauly comments on some Palmyrene coins lately found. The Turkish government has garrisoned the place, and checked back the Bedouins, so that it is now possible to explore the country.—The year's work in the department of the Seine is described: of the Roman age, a theatre has been found at St.-André-sur-Cailly, and a grand mosaic at Lillebonne; of the Frank, some jewels of gold, and a coin of Theodebert I.; of later times, the statues of the Plantagenets in the cathedral of Rouen, and the tombs of the Bishop of Orkney and the Scotch nobles who were sent to negotiate Mary Stuart's marriage with the Dauphin, and died at Dieppe.

Gött. gel. Anzeigen, Dec. 6.—Earle's Philology of the English Tongue is reviewed by Pauli more favourably than has been the case in England. Dec. 13.—Scheurl's Letters are noticed by Geiger as illustrating the career of those Humanists who went with Luther a little way, and then recoiled. They also illustrate the state of things at Nuremberg.—Liebrecht analyses the second part of the *Filologia e Letteratura Siciliana*, which gives an account of many mystery plays, and of some of the chronicles about John of Procida and the Sicilian Vespers.—Dec. 27.—Contains one of Geiger's series of articles on the Humanists—in this case John Butzbach, a monk of Laach, and his History of a Scholar's Wanderings, which gives a curious picture of the poor scholars of the time. Mahaffy's Prolegomena to Ancient History are praised and the contents analysed, attention being drawn to the criticism on Thucydides' method of accounting for all historical facts on mere political grounds, passion and chance being almost excluded. Benfey's review of Bleek's *Reineke Fuchs* in Afrika, and Köhler's review of Zingerle's Tyrolese Children's Stories, add something to our materials for this new branch of comparative science.

Literarisches Centralblatt (Dec. 9) notices several books on the late war, and especially praises Forbes' book.—An account of some critical editions of Schiller's works follows. Dec. 16.—Scheffer-Boichorst's reconstruction of the Annals of Paderborn is praised and upheld against Waitz' objection of "being overbold."—A notice is given of Kiepert's new maps of Greece, and of the authorities on which they are based.—Ahlwardt's account of the Arabic MSS. at Berlin is praised, especially for the notices of the poets.—Some corrections are supplied for Keil's edition of Dosithei Ars Grammatica; and Kühnast's excellent book on the Syntax of Livy is well characterized.—Dec. 30.—Contains a notice of the thirtieth volume of the *Fontes Rerum Auctriacarum*, which collects the Venetian ambassadors' despatches from Germany, of which Ranke has made so much use. The volume

unfortunately only gives those which now exist at Vienna, thus excluding some of Ranke's chief authorities. Trieber's Enquiries into the History of the Spartan Constitution, which is really an enquiry into the sources of our knowledge about Sparta, is reviewed unfavourably in some detail by Bucheler.

Theologisches Literaturblatt (moderate Roman Catholic), Dec. 4, gives a summary of the "Old Testament literature" of the year, by Reusch.—Knittel reviews Maywald's book on the "Twofold Truth" (i.e. a regulative religion for the people, an inner philosophical meaning for the educated) as a theory of the middle ages.—A notice follows of Joel's book on the connection of Spinoza's ideas with those of previous Jewish teachers.—Loersch's *Aachener Rechtsdenkmäler aus dem 13., 14. und 15. Jahrhundert* is praised as illustrating the manifold development of the town constitutions of Germany in the middle ages, which must be investigated separately, general propositions about them being very fallacious. Dec. 18.—Reviews the last part of Winter's book on the Cistercians in North Germany, which shows the inevitable decline of the order. The reviewer naturally thinks the case against them somewhat overstated.

New Publications.

- ARNETH, Alfred Ritter von. Joseph II. u. Leopold von Toscana. Ihr Briefwechsel von 1781 bis 1790. 2 Bde. Wien: Braumüller.
- BEDELL, Life of Bishop, by his Son. Now first edited by J. E. B. Mayor. (Cambridge in the Seventeenth Century, Part III.) Cambridge: Deighton, Bell, and Co.
- BEITRÄGE zur Beantwortung der Frage nach der Nationalität des V. Copernicus. Breslau: Priebatsch.
- BRUNNER, Sebastian. Correspondances de Joseph II avec Cobenzl et Kaunitz. Mainz: Kirchheimer.
- EBELING, F. W. Archivalische Beiträge zur Geschichte Frankreichs unter Carl IX. Leipzig: Wöller.
- FOUCART, P. Mémoire sur un décret inédit de la ligue arcadienne. Paris: Lib. Franck.
- FREEMAN, E. The Norman Conquest. Vol. IV. The Reign of William the Conqueror. Clarendon Press.
- FRIEDLÄNDER, L. Darstellungen aus der Sittengeschichte Roms in der Zeit von August bis zum Ausgang der Antonine. 3. Theil. Leipzig: Hirzel.
- HANSETAGE, Die Recessen u. andere Akten der, von 1256 bis 1430. Bd. II. (Published by the Historical Comm.) Leipzig: Duncker u. Humblot.
- KOSSUTH'S, L. Briefe an F. M. L. Bein. 1849, März-Juni. Herg. v. A. Makray. Pest: Heckenast.
- LUGEBIL, K. Zur Geschichte der Staatsverfassung von Athen. Untersuchungen. (Reprint from Jahrb. für classische Philologie.) Teubner.
- SCRIPTORES RERUM SILESIACARUM. 7. Bd. Historia Wratislaviensis von P. Eschenloer. Breslau: Max.
- VIVENOT, Alfred Ritter von. Vertrauliche Briefe des Freiherrn von Thugut. 2 Bde. Wien: Braumüller.

*Philology.**THE PRONUNCIATION OF LATIN.*

VIII.

The Letter V.

1. PROFESSOR MAX MÜLLER's article on the Latin letter V, in the *Academy* for December 15, vol. ii. p. 566, induces me to add a few supplementary observations to my former remarks (*Academy*, April 15, p. 231), bearing especially on the confusion of the mixed dental and labial forms f, v, as used in English, with the pure labial forms, which I shall continue to write f', v', and of these latter consonants with what may be termed the mixed lingual and labial English forms wh, w.

2. In my *Early English Pronunciation*, p. 518, I note that "the letters β, φ," in modern Greek, "seem to be naturally pronounced by Prof. Valetta as v', f', but when he became particularly emphatic, he made them v, f," that is, his lower lip involuntarily struck the upper teeth. Again (*ib.* p. 549), I note with respect to Mr. Magnússon's *Ice-*

landic pronunciation, "V is *v* with so slight a contact of the lower lips with the upper teeth as to vary in effect at different times as *v*, *v'* ;" and Mr. H. Sweet adds, referring to Mr. Hjaltalín's pronunciation, "I thought at first that V was *v'*, and I was only induced to consider it as a *v* by the distinct statement of Mr. Hjaltalín that it was a dental sound." Previously (*ib.* p. 542), I note of Mr. Magnússon's F that it is "properly *f*, with a very mild hiss, scarcely more than a single tooth being touched by the lower lip, so that it approaches *f'*. It has this sound only at the beginning of syllables, or before S, or when doubled. At the end of a word it falls into an equally mild *v'*." Again (*ib.* p. 549), I remark "that V was not originally *v'*," in Icelandic, "is clear to me from the combination HV, which is called *wh* in the southern and *kw'h* in the northern districts of Iceland," of course according to Mr. Magnússon's oral information, *kw'h* representing the simultaneous and not successive pronunciation of *k* and *wh*, or rather a sound bearing to *kw'*, the labialised *k*, the same relation as *kh* does to *k*. According to Mr. Melville Bell, for whose notation of Mr. Hjaltalín's pronunciation I am indebted to Mr. Sweet, he heard V, F as *v*, *f*, and both HV and KV as *k + wh*, which indicates a very unusual sequence, the ordinary recognised form being *kh + w*, which is in Scotch and Welsh rather *kw'h*. As a correction of my statement in the *Academy*, vol. ii. p. 231, col. 2, line 3, respecting Welsh pronunciation, I have lately been informed by a South Welshman who can pronounce *wh*, but is not always clear on *w*, that the Welsh CHW is not *wh* in South Wales, but *kw'h*, or, as he conceived it, *kh + oo*, as in the north.

3. Lepsius (*Standard Alphabet*, 2nd edition, 1863, p. 75) says: "We ought perhaps to notice here the particular pronunciation of W in Middle Germany, where this letter is no *labio-dental*, formed between the lower lip and the upper teeth, as V in England, France, Northern Germany, India, &c., nor the *semivowel* W of the English, Arabic, and many other languages, but a pure *labial* sound, formed between the upper and lower lip without any *oo*-position" (in order to avoid theories respecting Latin sounds I use the common English representation of vowels, and hence transliterate Lepsius and other writers, where necessary) "of the lips and tongue, and without any concurrence of the teeth. This is, however, a sound which *I never heard of in any language*" (my italics), "except the provincial German dialects, and for this reason it needs hardly a peculiar designation in our alphabet, where, if wanted, it might be written," with a dash under a *w*. Lepsius accordingly gives *f*, *v* in Japanese and Magyar, of which hereafter (see Nos. 7 and 8). Dr. Brücke, himself a Lower Saxon, from the northern seaboard, writing in Vienna (where every one says *f*, *v'* and not *v*), says (in his *Grundzüge der Physiologie und Systematik der Sprachlaute*, 1856, p. 111), respecting my having called *v'* the German W in a previous work, that I hold it "erroneously" (*irrtümlicher Weise*) for the usual German W, and (*ib.* p. 34) says that *v*, "the V of the French and English," is the usual German W, but that *v'* occurs where *qu* is written, as in *Quelle*, *Quirl*, *quälen*, sounded with *kv'* for *qu*. He also says (*ib.*, here translated), "We can also produce an *f'* by making the narrow passage through which the air has to rush in order to produce the characteristic fricative noise of a consonant, without employing the teeth, but merely by approximating the lips. This *f'* is somewhat softer (*milder*) than the usual *f*, and is used by many people where we write a V in German (*wird von manchen Leuten da angewendet, wo wir im Deutschen ein V schreiben*), whereas the majority do not distinguish F and V." That is, Dr. Brücke recognises, at least dialectically in Germany, *f* for F, *f'* for V, and both *v* and *v'* for W. As regards Dutch, Dr. Gehle,

minister of the Dutch Reformed Church in Austin Friars, in the City, told me that the alphabetic names of the Dutch U, V, W are *ue* (as in German), *vai*, *v'ai*. Heknew the English *w* quite well, and observed that all Dutch children in saying their alphabet made this distinction. Merkel (*Physiologie der menschlichen Sprache*, Leipzig, 1866, p. 209, here translated) professes that he cannot at all understand Lepsius' assertion just cited that *v'* is "provincial." "We Middle Germans," say he, "have certainly as much right to call the abnormal (or aberrant, *abweichende*) formation of W by North Germans, English, and French, provincial or dialectic, as conversely. Persons, too, that have lost their upper teeth have also, I hope, a voice in this matter." "Persons with no teeth at all can pronounce W = *v'* as distinctly as those with a full set." Merkel distinctly recognises *f'* in German, writing it V, asserting that it is used in whispers for *v* or W, and (p. 210) that this is the form assumed by F in the High German PF, which combination, he thinks, was the original Greek θ, of which opinion perhaps the Japanese treatment of the aspirate (below, No. 7) may be found to give a confirmation. But after fully recognising *f*, Merkel comes to the following very curious result respecting *v* (as distinct from *v'*), which I recommend to the serious consideration of those who find *v* the only natural sound (*ib.* p. 212). "The sound *f* cannot be vocalised, that is, united with vibrations of the vocal chords, without change of position (*als solches*). The organs could not help (*müssten*) assuming in the attempt (*dabei*) an intermediate position between that of *f'* and that of *f*, and separating so far that no sensible (*erheblich*) noise can result. In this way, on vocalised breath passing, a sound is produced which is scarcely distinguishable from the usual *v'*, and for which the two lips are not exactly opposed (*nicht genau einander gegenüber stehen*), the lower lip being slightly retracted under the upper lip. It would be superfluous to have a distinct written symbol for this *v*, which, according to Brücke, is the usual one in German, French, and English." Accordingly he uses only V, F, W, V for *f'*, F for *f*, and W for *v'*, and also for this peculiar *v*, which is certainly unknown in England, whereas he is himself unable to pronounce (and notwithstanding his laborious physiological investigations apparently to conceive) the common English buzz *v*. All who wish to see how national habits cloud phonetic apperception should read Merkel's observations on these letters (*ib.* pp. 208-213). Prof. Haldeman (*Analytic Orthography*, 1860, p. 102) truly says: "There is no certainty in the accounts of English V and German W occurring in exotic languages, for when either is mentioned, we have no proof that the observer knew the difference. For example, although the modern Greeks asserted in the most unqualified manner the identity of their β with English V, they were in error, and it has been but a few years since this question was settled. In a similar manner, the Spanish grammarians are still mystified about their B and V." Prof. Haldeman, it should be observed, strongly advocates the *w* sound of Latin V (*Elements of Latin Pronunciation*, Philadelphia, 1851, pp. 34-36).

4. The mention of Spanish B and V by Prof. Haldeman should be taken in connection with Prof. Max Müller's remark (*Acad. Dec. 15, p. 567, col. 1, (2)*), that *v* is "uniformly adopted in . . . Spanish . . ." Now, Prince Louis Lucien Bonaparte, whose accurate phonetic knowledge of living languages is rather uncommon, and who has had much opportunity of studying Spanish sounds, supplementing my observations upon them (*E. E. P.* p. 802, note 2), tells me that Spanish B and V are two signs, each of which represent the same one of two sounds under the same circumstances, so that it is a matter of perfect indifference, so far as the written form is concerned, which letter

is used. When B or V is written where BB* occurs in Italian, a clear *b* is sounded. Where B or V is written after a consonant, a clear *b* is also sounded. But where B or V is written at the beginning of a word (and not following a word ending with a consonant, on account of the preceding rule), or after a vowel in the middle of a word, the sound is always *v*. Compare *Ortografía de la Lengua castellana compuesta por la real Academia española* (Madrid, 1792), where, after acknowledging (p. 27) that B and V are commonly pronounced alike, it says that the proper mode of pronouncing V is “by striking the lower lip, accompanied by the tongue, against the upper teeth; as in case of F,” an entirely theoretical direction, as is apparent from the long rules given for determining when B and when V should be written, and from the needless introduction of the tongue, as in case of my Hungarian (below, No. 8).

5. Prof. Max Müller learns from Mr. Rhŷs that Welsh possesses both *v* and *w* (*ib.* p. 567, col. 2; see also *Acad.* May 1, p. 256, col. 1). Welshmen who have learned English, more or less accurately pronounce *w*. My own impression is that in unalloyed Welsh *w* is unknown, having always remained a simple *oo*.† It is a point that requires clearing up by English ears and Welsh mouths. Ask Welshmen who cannot speak English to repeat: *Would ye yield the woman Wood woode?* Even those long used to English find a difficulty with *woman*. The vowel *oo* is lingual and labial; the back of the tongue is raised nearly into the *k* or *g* position, the lips are closed nearly into the *w* position. English people naturally assume the *w* position when a vowel follows. That other nations do not, they may hear by attentive and often repeated (not casual) listening to such words as the Italian *uomo*, *upo*, and the French *ouais*, *ouate*, *ouest*, *oui*, as contrasted with the English *wa(r)m*, *wa(r)p*, *way*, *wattle*, *west*, *we*. (The last scene in *Le Duc Job*, as performed by the Comédie Française in London last summer, offered an excellent study of *oui*.) To say *w* the lips approach nearer, spoiling the resonance by which alone the vowel quality *oo* is possible, and the greater effort necessary to produce a buzz, in which vocalised and unvocalised breath contend, drives out the lips all round the aperture, especially the parts of the lower lip on each side of the medial line, the breath being directed downwards by the position of the tongue. But on reassuming the clearly resonant position *oo*, after pronouncing *w*, we are able to say *w-oo*, a sound which is the despair of all Europeans who

* Double consonants are not used in Spanish, except as digraphs to represent new sounds, as *rr*, *ll*, and *nn*, the last being now usually written in the contracted form *ñ*.

† Salesbury, 1567, asserts Welsh W to be always a vowel, and considers of course English W to be so also (see *E. E. P.* p. 761—the spelling is here modernised): “In English ye call it double *uu* and in Welsh we give it the name of a single *u*, but then sounding it after the Latin pronunciation, or else as you now sound your *oo*: being always either the further or the latter part of a diphthong in English, on this wise: *with awe*, and in Welsh as thus: *vythy aven*.” The following observation of Salesbury bears on the transformation of this *oo* into a consonant: “And though I find in some ancient writers 6 for *vv*, yet in other I find *vv* in words now usually written with *v* or *f* as *cithavv*, for *cithav* or *cithaf*. In which kind of words, because they of South Wales use yet to keep the pronunciation of it” (Salesbury was from Denbigh in North Wales), “saying *tawvly* where we say *tawlv* or *taflv*, I do rather use for the more indifference to write *v* than *f*, even that they may the more aptly resolve it into their wonted vowel *vv*, and we may sound the same after our more consonant acceptance.” The received notion of the pronunciation of Welsh F is *v*. It would be worth while ascertaining after this statement whether *v* be not the real sound used by those who have not learned English. This is the more interesting as F appears as an initial mutation of B, and M, as in *eu burch*, *dy ffrwch*, *fj muwch*, their, thy, my cow, where the teeth seem out of place. Does the mutation PH in Welsh differ in sound from the radical FF, as in *ei phen*, her head; *ffen*, the flowing principle? and if so, how? as *f'*, *f*, or as *p,h,f'*?

are not English. There is, however, another mode of making *oo* into a consonant. The lips may remain in the *oo* position, but the tongue be brought up to the *k* position, which being vocalised gives a *g*, modified however by the rounded lips into *gw'*, that is the simultaneous utterance of *g* and *oo*.* Now, in Welsh there are a very few words written with W followed by a vowel, such as: *wab*, a slap; *wedi*, then; *weithian*, now; *weithiau*, sometimes; *wel*, well; *wela*, look; *wi*, hey! *wihi*, whinny; *winc*, chaffinch; *wo*, wo! *wy*, of him; *wybr*, sky; *wyd*, thou art; *wyf*, I am; *wyl*, a flow; *wylo*, to wail; *wyn*, lambs; *wyneb*, face; *wyr*, a grandchild; *wyrain*, spreading; *wysg*, presence; *wyt*, thou art; *wyth*, eight, and their derivatives; in all of which I think rather *oo* than *w* will be heard when actually tested. But *gwa*, *gwe*, *gwi*, *gwu*, † *gwi* begin hundreds of words, while *gwv* and *ww* are never found. Of course, *g* falls out, and *w* resumes its vowel power in initial mutations. I believe, therefore, that I am right in saying that no extra-Anglican European lip is now familiar with *w*. The diphthongal use of *oo*, *ee*, requires careful discrimination from the consonantal use of *w*, *y*. Almost all writers confound the final elements of the diphthongs in *my cow* with *y* and *w*. Yet these final elements are, in English, neither *y*, *w*, nor *ee*, *oo*, but that peculiar modification of *ee*, *oo*, heard in *bit*, *foot*. The effect of a diphthong is produced by running one vowel on to another in a *glide*, or *variable sound*, resulting from continuing to utter vocalised breath while passing from one vowel position to the other. For the true effect of the diphthong one of the terminal vowel sounds must be shorter than the glide. In *my cow*, the first element, which is the same in both words, has the stress and is remarkably brief; the second element is often very long, and has no stress; the glide is intermediate in length. The prolonged second element bears no resemblance to a prolonged *y* or *w*. But the glide from the first to the second element is identical with that leading from the first element to *y* or *w*. The syllables *ääy*, *ääw*, can be pronounced after some practice, quite distinct from the diphthongs themselves, ending with as pure a buzz as *ääz*, or *as*. The initial short and stressless elements *ee*, *oo*, do not occur at the commencement of diphthongs in English, as, to my ears, they do in Welsh, and as they may once have done in Latin. If you say *ee* + glide + *ää*, *oo* + glide + *ää*, the effect to one accustomed to *y*, *w*, is *yaa*, *waa*, and at most, after two or three hearings, he may say, you pronounce *y*, *w*, imperfectly and rather thickly, rather French fashion, and not quite like an Englishman. The very brief *ee*, *oo*, differ so slightly from the very brief buzzes *y*, *w*, that, since the glides in the former and latter cases are identical, it requires considerable practice for the ear to discriminate them sharply. And yet, in point of fact, those who habitually begin with *ee*, *oo*, seldom learn to begin properly with *y*, *w*, and conversely. It is only by such testing instances as *yee*, *woo*, which cannot commence with *ee*, *oo*, that the fact is brought out. This being the case, those nations who use *ee*, *oo*, habitually give them consonantal syllabic value. This is remarkable in French. There is no doubt that in *Richelieu*, the *li* is *ée* short and not *ly*, yet the *e* in *Riche* is always pronounced, just as if its omission would have brought the three consonants *ch* + *l* + *y* together, an almost inadmissible combination in French speech. By omitting the glide, the diphthongs are resolved into two vowels, and the shortest element then generally gains in length. An accurate knowledge of diphthongal formation is indispensable in the present enquiry.

* This relation of *oo* to *gw'* explains the alliteration of G and W in Anglo-Saxon, noted as frequent by Dr. March (*Anglo-Saxon Grammar*, 1871, p. 224, end of art. 504).

† In Welsh, U is not *oo*, but a peculiar modification of *ee*.

6. In Arabic, so far as I can recollect from the instruction received from three natives many years ago, *w* is used. But I have had no recent opportunity of testing the point. It is a significant fact that written *woo* becomes spoken *oo* in Arabic. Turks are said to have *v* and not *w*, and to pronounce imported Arabic words, like *vizier*, with *v*. It is worth testing for *v'*. Arabic leads naturally to Hebrew, but the pronunciation of the latter is entirely theoretic, and there may have been original differences between the two, similar to those between Welsh and Gaelic, or Low and High German. The system of pointing introduced in later times leads to the supposition that at least at that period *בּ, בּ, וּ* may have been *b*, *v*, *w*, and *בּ, בּ, פּ, f*. Arabic is said to have *f*. After some recent experience, I feel doubtful of all assertions respecting *f* as well as *v*. Certainly *f* is a comparatively rare sound, and *f'* may prove more common than is generally supposed. Although, on a casual hearing, especially of foreign words, an Englishman naturally assumes *f*, *v*, in place of *f'*, *v'*, even if the latter be really pronounced, nothing is easier than to test by the *eye*, and to put the question whether the teeth are touched or not by the lower lip. A wide examination of existing languages, dialectic European, and especial extra-European, is here advisable, as the following observations will show, which I have had an opportunity of making within the last few weeks.

7. Two young Japanese, one of whom speaks English well, were recently kind enough to go through the Japanese syllabary with me. The five Japanese vowels are, as nearly as possible, those heard in the English words *baa, bee, boor, bear, bore*, the last four being slight modifications (produced by the action of the R) of those heard in *beet, boot, bate, boat*, and we may therefore write them for the present purpose, *aa, ee, oo, ai, oa*. To each of these the same consonant is prefixed in the syllabary, and the compound effect is represented by a single sign. One set of five syllables is supposed to begin with *h*. The sounds *haa, hai, hoo* were heard truly as in English *hart, hair, hoar*. But in place of *hee* I heard a sound which at the time I took for *ky'h* (or *ch* in the German *ich, Mädcchen*), but which I am on reflection inclined to suppose was *yh* (the English *h* in *hue*), or, very nearly, unvocalised breath forced through the *ee* position. German writers all confuse *ky'h* and *yh*, but they are really as distinct as *kwyh* and *wh*, and bear the same relation to unvoiced *ee* as the latter do to unvoiced *oo*. We should then have expected *kwyhoo* or *whoo* in place of *hoo*, but the real Japanese sound was distinctly *f'oo*. The speaker from whom I heard the sound had very projecting upper teeth, so that Englishmen would naturally suppose his lip could scarcely avoid them. But on the contrary, he had experienced great difficulty in acquiring the English *f*, and in distinct language repudiated any contact with the teeth. Yet Lepsius gives this sound as *f* (*ib.* p. 246), although Dr. Hepburn (*Japanese Dictionary*, 1867) recognises *f'*. In Aberdeen there is a well-known peculiarity of pronouncing *f* for *wh* in *faar'*, where, *faa, who, &c.* Is this really *f* or *f'*? In England where we ought to have had *whoo, whoom, &c.*, we have reversed the Japanese habit, and substituted the simple *h*, as *hoo, hoom*. These two exactly contrary tendencies should be well weighed by those who would determine a sound by "natural" in place of "national" relations. The following shows another national tendency. Dr. March (*ib.* p. 5) says that Anglo-Saxon *HW* is like *wh* in New England. In a private letter to me he says: "A clear and distinct *h* before the *w* hardly attracts the attention of a New Englander," and Mr. Bristed confirms the remark. As however *h + w* presents many difficulties, I ventured to suppose that the real sound was our *wh*, and Dr. March obligingly tells me: "In my own pronunciation of *which*, I set the lips for *w*,

then untoned breath is issued, then the parting of the lips and general movements of the organs which I have taken to be the *w* is made." That is, he says *wh + w + ich*, in place of the simple English *wh + ich*. This is also Professor Haldeman's analysis (*Anal. Orth.* p. 127, art. 602, line 2). It is similar to the usual German *s + z + ee* for *sie*, as compared with the English *z + eel* for *zeal*. In ordinary English we have the reverse at the end of a clause as *hiz + s, breedh + th, haav + f* for *his, breathe, halve*. But the value of this example depends on Dr. March's subsequent observation: "The surd breath issued before the opening movement of *w* is what we New Englanders call *h*." That is, before *oo* the Japanese consider *f'*, and before *w* the New Englanders consider *wh* to be the simple aspirate. Both have been generated by a following letter presenting effectively the same position of the organs. It can only be national as opposed to natural tendencies which generate *f'* in one case and *wh* in the other. In England we have certainly *f* in *laugh, draft, dwarf*, where there is nearly historical evidence that the process of derivation was *g, gh, gw'h, wh, f, f'*; compare also the Icelandic treatment of *g* (*E. E. P.* p. 312 and p. 543). The Japanese *p* series seemed to be post-aspirated in *p'haa, p'hee, p'ho*, the two latter not becoming *pyhee, pf'oo*, as might have been expected, and similarly *k'haa, k'hee, k'ho*, not *ky'hee, kf'oo*; but this postaspiration may have been a personal peculiarity. Such undoubtedly was the pronunciation *baa, v'ee, v'oo, bai, boa*, which was corrected by the other speaker, whereupon the first said *bee, boo*, but he subsequently, and clearly habitually, fell into *v'ee, v'oo*. The *w* occurred only in *waa*, the simple vowels *ee, oo, ai, oa*, were substituted for *wee, woo, wai, woa*, showing probably a Japanese orthoepical difficulty. There seemed even to be some peculiarity about this *w* in one of the speakers. Again *yaa, yoo, y'ooa* were said, but *yee, yai* sank into *ee, ai*, also probably from orthoepical difficulty. The *t, d, s* series were also very peculiar for the vowels *ee, oo*. I heard *t'haa, tsy'ee* (where *sy'* indicates simultaneous pronunciation of *s* and *y*) *t'hai, toe; daa, dz'yee, dai, doa; saa, sy'ee, sai, soa*. But in place of *oo* in *too, doo, soo*, was uttered an exceedingly puzzling sound, which Hepburn writes *z* in *tsz, dz, sz*, but which may be imitated by *tsw, dsw, sw*, using the buzz of the *w* as a vowel. The sound was very short, and a labialised buzz was quite evident. The real sound remains in doubt. Lepsius (*ib.*) simply writes *oo*.

8. A young Hungarian, to whom I was explaining some English sounds, and who speaks English with great fluency, surprised me by finding difficulties with F and V. Csink (*Hungarian Grammar*, 1853, p. 2) assumes the English and Magyar F and V to be the same. I found that my pupil had no conception that he had to touch the teeth with his lower lip. When he endeavoured to imitate the sounds I gave him, he tried to make the hiss or buzz by using *f*, *v*, and putting his tongue against the teeth, producing remarkable compounds of *f*, *th* and *v*, *dh*. The direction to leave his tongue inactive and bring his lower lip against his upper teeth came to him as a revelation. I cross-examined him on the point, and he persisted that no Hungarian ever used his teeth for F and V. I requested him to ask some Hungarian friend of his in London. He did so, and reported that his friend also knew nothing of the action of the teeth. Yet Lepsius gives *f*, *v*, as the Magyar sounds (*ib.* p. 220). When my pupil complained of the great harshness of the English sounds, I could not help recollecting Quintilian's "dulcius spirat" said of Greek *φ*, and his "tristis et horrida, quassa quodammodo" applied to Latin F (*ib.* 12, ch. 10).

9. I have not had the advantage of examining any Englishman who habitually and unintentionally confused V and

W, but it would be very desirable for those who can catch such an individual (existing palpably enough in the mind of writers and of low comedians) to determine whether they do not say *v'*, which would probably sound as *v* when used for *w*, and as *w* when used for *v*. It is a pity old Mr. Weller, who spelled his name with a *wee* (*Pickwick Papers*, 1st ed. p. 366) cannot be put under examination. Last June, however, Mr. Bristed, of Lenox, Massachusetts, favoured me with the following information: "The inhabitants of Charleston and all the southern and south-eastern part of this state pronounce initial W, whether at the beginning of a word or a syllable, like V. Like V to me; perhaps you should call it *v'* or German W, which I own myself unable to distinguish from V. This peculiarity is common to all classes, except those of the upper class who have lived in Europe or at the north. They are not aware of it. I cannot find any European origin for it. It is supposed to come from the negroes. Teachers from the middle of the state have told me that the boys from the central and northern districts pronounce W in the usual and correct way." The French *bivouac* as compared with the German *Bettwache*, contains all the elements of this confusion, *voo* having been substituted for *v'*.* The older French form *guet* from *Wacht* takes the other direction. Mr. Nicol, whose assistance I have elsewhere had to acknowledge (*E. E. P.* p. 724) is of opinion that the use of GU for the German W is evidence of a former pronunciation of German W as *w*, since *g* could apparently only have risen from the elevation of the back of the tongue, which is (at least generally) absent in *v'*. But if so, the use of *gu* in Italian establishes at least an ignorance of the sound of *w* in Italy, at a very early period. Perhaps I was wrong (*E. E. P.* p. 514, note) in thinking that "if the tongue is raised when sounding *v'* no ear would distinguish the result from *w*." At any rate I find that I can keep the back of my tongue firmly fixed in the *oo*-position, and yet distinguish *w*, *v'*, solely by keeping the lower lip tense for *v'* and pressed in on each side the medial line, so as to direct the breath upwards. I find also that when I blow out strongly, I hollow the cheek somewhat like a clarinet player, for *f*, and round the cheek somewhat like a trumpet player for *wh*, the effect being of course greater in these voiceless forms. Mr. H. Sweet and Mr. Nicol, however, incline to think that a hollow cheek belongs to the *oo*-position. Hence if *w* was unknown in Italy when *gw'* was invented, we should be able to have German *v'* and Italo-Latin *v*, as Prof. Max Müller prefers.

10. Mr. Roby, who in his *Latin Grammar* prefers *w* for Latin V, after reading Prof. Max Müller's article in the *Academy* of 15th December, addressed to me a number of questions, some of which have been incidentally answered in the preceding paragraphs. Perhaps it may be of interest to the present enquiry to add brief replies to the remainder. The sound *wh* is only known to me as occurring in English and Icelandic. It is very probable that *w* may occur in Oriental languages (see above for Arabic, No. 6, and Japanese, No. 7), but it may be really a diphthongizing *oo* which has been taken for *w* (see above for Welsh, No. 5), and Lepsius probably does not accurately distinguish these sounds, which are almost universally confused, as he certainly did not distinguish *f*, *v'* (see above for Japanese, No. 7, and Magyar,

No. 8). A confusion of *w* with *v* does not seem probable to me. The English *w* can be distinctly pronounced so as to close a syllable, with a preceding accented short vowel (see No. 5). The German *v* and also *f* regularly and easily close syllables in the pronunciation of my Hungarian pupil, without a vowel following. The Germans of course have no such ending, as they regularly terminate words with voiceless consonants, whatever letters be written. I believe that the modern Greeks generally pronounce *eu*, *au*, before a voiced consonant or vowel as *ev'*, *aav'*, and otherwise as *ef'*, *aaf'*, as in *airos*, but there is always a possibility of more or less dentality (as noted above, No. 2). The change of *oo* into dental *v*, as noted by Pānini, certainly shows his own pronunciation, but it was possibly as much a modernism in his time as our *f* in *laugh*, *draft*, *dwarf*, in our own. Prof. Max Müller (*supra*, vol. ii. p. 566, col. 2) has given two authorities for a pure labial sound in Sanskrit. If both *v*, *v'* co-exist in Germany, *v* as Lower and *v'* as Upper German, why may not both have at one time co-existed in India? But *v* seems certainly a more recent form than *v'* in Germany. Why then should it not be so both in India and Italy? As to the falling out of a dental *v*, the English *en*, *er*, *ill*, Scotch *deil*, *gin*, for *even*, *ever*, *evil*, *divel* (old form), given, seem to show the possibility. The English *w* falls out in *I'll*, *I'd*, *you'll*, *you'd*, older *for'ard*, *back'ard*, usual *fro'ard*, *to'ard*, and *Green'ich*, *Dul'ich*, &c., but I cannot call to mind instances like the Latin. Actually in Magyar the verbal roots *szöv*, *töv*, *riv*, *növ*, *jöv*, lose their *v* = *v'* before the infinitive affix *ni*, and lengthen their vowel from *ö* to *ő*, but *hiv*, *ssziv*, *viv* either lose or retain the *v*. The Latin *pra(v)o)rsus*, *ho(v)o)rsum*, *ama(v)i)sse*, &c. may perhaps be compared with this Magyar custom. The Germans whom I heard while residing in Germany always seemed to use the succession *k* + *v'* and not the labialised guttural *kw'* for initial *qu*. I believe the Magyars when they spoke Latin said *ekv'oos* for *equus*. I feel no tendency for *n* to become *m* before *v'* or *w*, or even *v*, because no English and German syllables occur which end with *-nv'*, *-nw*, *-nv*. But in Scotland *Banff* is called *Bahmf* (*ah* being rather spoken with the back of the tongue lower than for *aa*). In Latin the assimilation of prefixed prepositions, as *ad*, &c., shows that the final consonants must have been more closely connected than in English or German. This may account for *impero*, *immotus*, *commotus*, whereas English *unprotected*, *unmoved*, and German *unbrauchbar*, *Urmensch*, *unfehlbar*, *unwohl*, show no such tendency. The lengthening of the vowel in *in-sanus*, *infaustus* (as noted by Cicero, but I cannot recover the reference at the moment), in *in* before *f*, *s*, perhaps indicates a difficulty in running the *n* on to *s* or *f*. As a substitute for *b*, I should consider *v'* more physiologically probable than either *w* or *v*, because the change of *b* to *v'* is a minimum, whereas for *v* the lower lip has to be violently retracted and brought hard against the lower teeth, and for *w* the back of the tongue has to be raised and the lips more rounded. If any one compares *p'ooze* with *p'ooze*, German *p'fui*, he will feel the difference strongly. When we think we say *pwee*, for French *puis*, we really pronounce *p'w*, by preparing the tongue before releasing the lips. Actually *b*, *v'* interchange in dialectic German very frequently. I do not recall any instances of *b* and *w* interchanging. I consider *b* much more closely related to *v'* than to *w* or to *v*, and its relation to the two latter sounds is not direct, but indirect, through *v'*.

11. This is a mere collection of materials, to which it would be out of place to add an examination of the arguments for and against the pronunciation of Latin V as *w*. But in connection with the foregoing the following points should be considered. Latin V and Italian V are now *v* in Italy and in France, but either *b* or *v'*, not *v*, in Spain. I

* Compare the Greek *ovβ* for Latin V in *Mηνοβιάδος* for *Mevianus* (Corssen, i. 311). Compare also the curious remark of Salesbury (quoted in my *E. E. P.* p. 762—the spelling is here modernised):

"Although the Germans use a *vv*, yet in some words sound them it (to my hearing) as the further *u* were a vowel, and the latter *o* [a ?] consonant, where we the Britons sound both *uu* wholly together as one vowel, without any several distinction." Salesbury should mean *oo*, but may have meant *voo*.

cannot answer for the other Romance dialects. These sounds are not modern. The instances in Nos. 2 and 3 suggest that they were preceded by a mixed or geographically limited pronunciation as *v'* and *v*, of which the latter could have been derived from the former by emphasis (No. 2). In the time of Claudius a distinction between V followed by a vowel and followed by a consonant was felt, and a desire arose to mark it by a new sign. The former value was declared to be consonantal. Take *consonans* strictly, the name applies equally well to a consonant as now conceived (which implies an impediment in the way of strict vowel resonance) and to the stressless element of a diphthong connected with, or *sounding-with*, the element bearing the stress by means of the glide (see No. 5). When we find in especial that Sir Thomas Smith 1568, John Hart 1569, Bishop Wilkins 1668, all regarded English W as *oo* (to the extent of writing *oo-oo* for *woo*), and that the same opinion extensively prevails at the present day, while the rejection of *n* from the indefinite article preceding W, as in *a week*, not *an week* (even in the Authorised Version, 1611, which generally retains *an* before *h*), shows that no such hiatus was felt in this case as in *an oozy bed*, we must allow that the same indistinctness of conception possibly prevailed in the minds of still older orthoepists, as Marius Victorinus, Priscian, Quintilian, &c. We have, therefore, no right to conclude that when they said V was a consonant they meant more than that V was the stressless element of a diphthong. The cases of V and of I are precisely similar. Now Priscian (as quoted in Corsen, i. 299) says: “*i quidem modo pro simplici, modo pro duplice accipitur consonante,*” the first in *Juno, Juppiter*, the second in *maius, peius, cius*, “in quo loco antiqui solebant geminare eandem litteram et *maius, peius, cius*, scribere, quod non aliter pronuntiari posset, quam si cum superiore syllaba prior *i*, cum sequente altera proferretur, ut *pe-i-us, ei-i-us, mai-i-us*, nam quamvis sit *consonans*, in eadem syllaba geminata iungi non posset: ergo non aliter quam *tellus, manus* proferri debuit, unde *Pompeii* quoque genitivum per tria *i* scribebant, quorum duo superiora loco *consonantium* accipiebant, ut si dicas *Pompelli*.” Now we know that the first of these *i*'s was not a consonant in the modern sense, but only the stressless second element of a diphthong preceded by the glide. The inference is that the second was the stressless first element of a diphthong followed by the glide, and in point of fact we have precisely this effect, and not that of *yy*, in French *paien, faience, nous louions, vous suiez*, although French writers insist on the consonantal character of this *i*, as also on that of *i* in *collection, cieux, matériel, aimions, vous chanteriez*, &c. (Thériat, *Le Phonographe*, 1857, pp. 29, 30).* In the case of *Pompeii* the threefold *i* had really the same meaning as the Italian *j* in *Pompej*, namely, the diphthong *ei* followed by *i* long. It is known that II and VV as the initials of syllables do not occur in older spelling. For the latter we have VO. Now on testing Welsh people with *would, woman, woo*, it will be found that they have a tendency either to say *oo* simply, or *oo* + glide + *oa*, or *oo* + glide + *o*. Many English say *wum-an*. It is therefore possible that I, V in Latin, so long as II, VV are not found as initials of syllables, were simply the vowels *ee, oo*, which

formed occasionally the stressless elements of diphthongs preceded or followed by the glide as the position required, and hence became *consonantes*, in the meaning attached to the word by the Latin grammarians. It is also possible that after II, VV were used as initials of syllables, a consonantal form (in the modern sense) was given to I, V, at least in those positions. This consonantal power may have gained ground. The modern Italian *Giugno*, &c. seem to indicate a precedent *yh*. The mixture of *ov, β*, in Greek transcriptions may indicate a mixed pronunciation, or a mixed conception of the sound by foreigners, leading to a confusion in spelling in the same writer, or a mixture of the alphabetic name *ou* with the phonetic equivalent *β* then = *v' or v*, but not *b* or *w*, although it had also to be used for *b*. The general use of *φ* to transcribe F, although we are certain that the sounds were different, at least as much as *v'* and *v*, shows that we must not press Greek transcriptions too hard. The Greek combination *oov* in *Ονουλτούρπος* was simply impossible to a Greek, except as *oo + oo* or *oo*. What was the possible consonantal sound (in the modern sense) which V received when the orthography VV initial became usual? Could it have been *w*? Could such a conception occur to the mind of any person to whom *w* was not a familiar combination, that is, among Europeans, to any but Englishmen? The passage from *oo* to *v'* consists in little more than dropping of the back of the tongue. The combination *v'oo* is very easy, as in German *Wuchs, Wund, Wunsch, Wurf, Wurm, Wurz, Wust, Wuth*. The combination *woo* is very difficult, even to Englishmen who are familiar with *w*, as in *woo, wood, woof, wool*, and is consequently rare, and often mispronounced. The inference seems to be that when initial II was called *yee*, initial VV was called *v'oo*. From *v'* the passage to *v* and the confusion with *b*, or with Greek *β*, was direct and easy. The final inference would seem to be that I, V should be considered as vowels, capable of becoming the stressless element of diphthongs, so long as II, VV initial are not found. That after these were found (and probably some time before they crept into writing, which always lags after speech) *y, v'* were employed when I, V were the *initial* (not the *final*) stressless elements of diphthongs. That in some words, and in particular in provincial pronunciation (as in Gaul and Spain, and partially in Italy, especially after Gothic irruption), *y* was pushed to *yh*, generating *dzh* in Gaul (subsequently *zh* or French *j*) and parts of Italy, and *gh* (or *kh* or the Spanish *j*) in Spain. That V either remained provincially as *v'* where B followed the same course (for example in Spain, as known to Romans even in classical times), or became dentalised into *v*, as being the firmer form and corresponding to the familiar *f*. But there seems to be no time during which English *w* can be interpolated. As a matter of practical convenience English speakers should abstain from *w* in Latin, because no continental nation can adopt a sound they cannot pronounce. As a question of date (which seems much overlooked, though synchronous pronunciation is the only one admissible), if the spelling VV is used, the pronunciation *v'* or *v* at pleasure may be employed, most of the Germans taking *v'*, and the rest of the world *v*. It may be noted that this overcomes the difficulty of contractions as *flvv-io-rvm rex* (*vv* giving long *v*), *par-ie-te*, compared with *flv-vi-o-rvm*,* *par-i-e-te*; and *mil-vos* with *mil-v-os*, the diphthongizing *i, v*, making position, compare the French *Richelieu* (No. 5, at end); and also of resolutions as

* The words of M. Jobert (*Colloquial French*, London, 1854, p. 42) form such an excellent commentary on Priscian's expressions that they deserve quotation: “The words *chancelier, chapelier, coutelier, &c.* do not appear graphically to contain a double consonant, but phonetically the *i*, in these words, fills the part of a consonant, in the same manner as the double *l* in the liquid syllables like those of *pillar, babiller, briller, &c.*; these *l*'s being pronounced as in *pi-ié, babi-ié, bri-ié*, the *i*'s of the former words are phonetically analogous in the last syllables, their articulation being *chancel-ié, coutel-ié, chapel-ié*.”

* Englishmen are so accustomed to pronounce *flvv-* that they may think it impossible to pronounce *flv-* with a secondary accent, and without a subsequent consonant. But *ruha*, dress, in Magyar, is precisely in this condition, *ru* being short but accented, and not gliding on to *h*, and presents no difficulty at all to Hungarians.

sol-v-is-se for *sol-vis-se*, because the resolution would be an archaism preserved as Vergil's *picta-i* for *pictae*, or the frequent poetic English *-ed*. They are not to be explained from the habits of pronunciation prevalent at a later time.

ALEXANDER J. ELLIS.

P.S.—As will be seen by the foot-note to p. 16, the above article was sent to the *Academy* before I had seen Prof. Munro's remarks (*ib.*). I think it better not to occupy further space with any observations on the few matters there suggested which I had not considered in my own paper, except the personal reference to Prof. Max Müller's pronunciation, which I had purposely passed over. Prof. Munro says, Prof. Max Müller "will not have forgotten that a few weeks ago the untutored ears of half a dozen of the best philologists in Oxford were unable to perceive the slightest difference between his English *w* and their own." When last I had the pleasure of hearing Prof. Max Müller speak, he was able, by an effort of attention, to pronounce *w* and *v* correctly, but he habitually used *v* for both, and this was more apparent in public than in private speaking. If I mistake not, the point was made a matter of enquiry at a private meeting on another subject between Prof. Max Müller, Mr. A. Melville Bell (the author of *Visible Speech*), and myself, on August 25, 1865. May I suggest that the "untutored ears" at Oxford would derive every possible information on the subject from the "tutored ears" and lips of Mr. Henry Sweet?

A. J. E.

THE GERMAN UNIVERSITIES AFTER THE WAR.

IT is only since the beginning of the winter term that these seats of learning can be said to have returned to their normal state. A large number of young men were in the field for nearly a year, but even those in the army of occupation obtained leave some five or six months ago to return to pursue their studies. It is very interesting to observe the effect the war has had upon the attendance as well as the spirit of the universities. With some few exceptions, they are overcrowded this winter, because many old students who would without interruption have finished their courses by this time, have matriculated again along with the freshmen of this year. Quiet and busy work has entirely replaced the anxious bustle of the camp; helmet and uniform are doffed; even a medal and its ribbon have given place to the academical caps and badges. The names of those who died for their country, engraved on marble slabs, are already hung up in the halls of their respective universities. The most remarkable fact, however, appears to be that nearly every one of the survivors, unless he has preferred to join the army for good as officer or surgeon, has resumed his academical course where he left off with the greatest eagerness. The rush into "Fachstudium" has never been stronger in Germany than at present. The old patriots of the Wars of Liberation who attended the universities soon after the peace of 1815 may deplore the total absence of that idealistic spirit which brightened or obscured the days of their youth; yet there can hardly be a better sign of a healthy national development than this decided predilection of the young generation for matter of fact. The increase or diminution of the number of students in the different places may also be taken as symptoms of some further changes. The contest between the great and small universities seems to be taking a new turn, which could hardly have been predicted a few years ago. The more expensive places, like Berlin, Bonn, and Heidelberg, are slowly going down, not always, however, from the same reasons. Berlin, which might be expected to be the great high-school of the new empire, has yielded the palm at last to Leipzig. This is to be ascribed not merely to the supposed mismanagement of the most unpopular minister of public instruction Prussia has ever had, but to the drawbacks, especially the high prices and rents; perhaps, too, the long distances unavoidable in a capital. Cities of a middle size are evidently taking the lead again. Bonn, on the other hand, besides the more luxurious style of life prevalent there, suffers at present from the interdict issued by the Archbishop of Cologne against almost all

the professors of the Roman Catholic faculty because of their anti-infallibilist tendencies; and Heidelberg still lacks a garrison in which the students may pass their year of military service. Places like Halle, Göttingen, and Tübingen, where the influence of academical establishments is supreme, and which on the whole are well provided for, have received more than their usual complement. Even some of the smallest size, like Greifswald and Marburg, continue in a highly prosperous state, which is chiefly due to the recent popularity of their faculties of medicine; whereas another class, represented by Giessen, Kiel, and Rostock, seem doomed to die of exhaustion. With them, too, the causes of decline are multifarious. A small government like that of Hesse-Darmstadt has not the means of supporting any longer the establishment at Giessen on the scale demanded by the present development in every branch of learning and science; and the old wealthy institutions at Rostock and Kiel are shunned by the Mecklenburghers and Holsteiners themselves, since they have the free choice of any university they like, whereas young men from the other parts of Germany hardly ever come to the shores of the Baltic, where life is both more expensive and slower than anywhere else. Yet Greifswald and Königsberg are to a certain extent exceptions to this rule. Jena, about fifty-five years ago the most fermenting seat of the "Burschenschaft," though not threatened exactly by a lingering death, has at last, as it were, succumbed to a musing condition of still-life. It may be hoped that the approaching reconstitution of Strasburg may prove to be the same successful experiment as Bonn, where, immediately after its foundation, the professors of name* and celebrity as well as students from all parts of Germany began to flock.

R. PAULI.

Intelligence.

Prof. W. D. Whitney, of New Haven, intends to publish in the next volume of the *Journal of the American Oriental Society* the results of a collation of a new MS. of the Atharva-Veda Prātiçākhyā. His own edition of this Prātiçākhyā, published in the *Journal* for 1862, was founded on the inaccurate and imperfect, but at that time unique, Berlin MS.

M. J. Derenbourg has been elected a member of the Institut (Académie des Inscriptions).

The *Transactions of the Royal Society of Saxony* for 1870 contain (pp. 227-295) the third part of Prof. Fleischer's Contributions to Arabic Grammar, viz. corrections, additions, and explanations to de Sacy's *Grammaire*.

New Publications.

BHATTA NĀRĀYANA, VENĀSAMHĀRA : Die Ehrenrettung der Königin. Ein Drama. Hrsg. v. J. Grill. Leipzig : Fues.

CURTIUS, G. Studien zur griechischen u. lateinischen Grammatik. 4. Bd. 2. Hft. Leipzig : Hirzel.

EPHEMERIS Epigraphica Corporis Inscriptionum Latinarum Supplementum. Edita jussu Instit. Archaeol. Romani. Fasc. I. pro i-iv. Berlin : Reimer.

FUCHS, E. Die Scholien d. Bar-Hebraeus zum 23. u. 29. Psalm. Halle : B. des Waisenhauses.

HISTORICI GRAECI MINORES. Ed. L. Dindorfius. Vol. II. Menander Protector et Agathias. Teubner.

INSCRIPTIONES HISPANIAE CHRISTIANAE. Ed. Aemilius Hübner, adjecta est Tabula Geographica. Berlin : Reimer.

MEUSEL, H. Pseudo-Callisthenes. Nach der Leidener Handschrift herausgegeben. (Reprint from Jahrb. für classische Philologie.) Teubner.

PONT, G. Origines du patois de la Tarentaise (ancienne Kentronie). Précis historiques, proverbes, chansons populaires. Paris : Maison-neuve.

STAMM'S Ulfilas, oder die uns erhaltenen Denkmäler der Gothischen Sprache. Text, Wörterbuch u. Grammatik. Neu herausg. von M. Heyne. 5^a Aufl. Paderborn : Schöningh.

STRATMANN, F. H. A Dictionary of the Old English Language. Compiled from writings of the 12th, 13th, 14th, and 15th centuries. Part I. Second edition. Trübner.

ZINGERLE, A. Ovidius und sein Verhältniss zu den Vorgängern und Gleichzeit. Röm. Dichtern. 3. Hft. Innsbruck : Wagner'sche Buchhg.

* The German papers report that Professor Mommsen has accepted a chair at Strasburg. We have not yet had time to verify this.

THE ACADEMY.

"INTER SILVAS ACADEMI QUARRERE VERUM."

Vol. III.—No. 41.

Readers are reminded that the mention of New Books, Articles, &c., in our lists is intended as a guarantee of their importance. The Editor of THE ACADEMY cannot undertake to return communications which are not asked for.

The next number will be published on Thursday, February 15, and advertisements should be sent in by February 10.

The Second Volume (October 1870 to December 1871) is now ready, bound in cloth, price 15s. Covers may be had of the Publishers, price 2s.

General Literature.

Modern and Ancient Greece. [Das Volksleben der Neugriechen und das hellenische Alterthum. Von Bernhard Schmidt. Erster Theil.] Leipzig : Teubner, 1871.

EVER since Leo Allatius published his tract, *De quorundam Graecorum opinacionibus*, in the middle of the seventeenth century, the attention of travellers has been drawn from time to time to the correspondence between the customs and superstitions of the inhabitants of the Greek peninsula in ancient and modern times. During the last fifty years the work of observing and collecting these had proceeded apace, and much valuable information is to be gathered from the works of such critics as Fauriel, Pashley, Ross, and Ulrichs, together with the numerous scattered notices to be found in the writings of the modern Greeks themselves. Latterly, a useful summary of these points has been made in C. Wachsmuth's pamphlet, *Das alte Griechenland im neuen*, which, for its size, contains a wonderful supply of valuable facts and suggestions on the subject. Still, much remained to be done in the way of bringing together additional material, and arranging it perspicuously with a view to comparison with antiquity; and consequently the present work has long been looked forward to as likely to supply this desideratum. It was also soon perceived that the discussion of this question was intimately connected with that of the origin of the modern Greeks, and that any well established resemblances in habits and beliefs would form a strong argument against the theory of Fallmerayer, that that people is of purely Slavonic race. Accordingly among Greeks it was expected that M. Schmidt's work would have a distinctly polemical object, and would professedly combat those whom they regarded as the foes of their nationality. The author, however, disclaims any purpose that is not purely antiquarian; but at the same time he has furnished one of the most convincing replies that has yet been given to the opposite view, not only from the general tenor of his work, but also from the arguments adduced in the preface, and especially in the collection he has made of the rarer words from ancient Greek, which are still to be found in isolated modern dialects—a source of proof on which he, with good reason, lays great stress, because, as they are unknown to the speech of the more educated classes, they show unmistakably that they must be indigenous, and not introduced from abroad.

Of the way in which M. Schmidt has executed his work we can speak in the highest terms of praise. Quite independently of its immediate object, the book is admirable as a collection of the superstitions of a country, and as such it will be of service to those who are gathering materials for

VOL. III.—NO. 41.

the early history of mankind. But it is in comparing the ancient and modern superstitions that the writer's skill is especially shown. What is most required for this purpose is a complete mastery over the details of the subject, as it is often in minor traits that the most convincing resemblances are to be found; clearness of arrangement, to facilitate comparison; and impartiality of judgment, to convince the reader that he is not being led astray by points of accidental similarity, and yet not to ignore what a careful examination will show not to be the result of chance. All this will be found in the present work, together with a thorough knowledge of classical antiquity: to which we may add that M. Schmidt has himself resided in the country for three years, principally in the islands of Zante and Cephalonia, and has there made a collection of popular songs and stories, which will form an excellent supplement to the *Griechische und albanesische Märchen* of von Hahn. It is a satisfaction to hear that this is nearly ready for publication, for it is often quoted in this book, and it is somewhat tantalizing to be referred to an authority which has not yet seen the light. We are not certain whether the writer has in all cases sufficiently estimated the amount there is in common between customs and ideas which he finds in Greece and other systems of superstition: perhaps the perusal of such a book as Mr. Taylor's *Primitive Culture*—a work *sui generis* for its grasp of the general subject and power of grouping—might lead him to modify some of his conclusions; but this is almost unavoidable in a subject of this character, and as a general rule he has shown remarkable self-restraint in avoiding doubtful points. Finally, we should not omit to notice the exhaustive way in which information has been gathered from a great variety of modern Greek publications, many of which can never be accessible to students in Western Europe.

The work is to consist of three parts, the first two of which relate to the superstitions, the third to the customs of the country: the first part has now appeared. Most of the figures that appear in this were already well known—the Nereids, who represent the ancient nymphs; Gillo, Mormo, and the Lamia, familiar bugbears of antiquity; the Telonia or spirits of the air; *οροχέα* or genii; the Fates, and Charon, the god of death, with many others. But the information that has been collected respecting them is given here much more fully than in any previous book, and not a few of the additional points are important from the resemblances they offer to ancient beliefs. Thus it is difficult to regard it as the result of chance that, while the classical Empusa was believed to have one foot of brass, the other like that of an ass, the modern Lamia has a brazen and an ass's foot. The story of the vulnerable heel of Achilles is reproduced in connection with certain giants, who are said to have been rendered safe from wounds by being dipped in a river by their mother, except in the ankle by which they were held. The Cyclopes reappear in a race of wild, lawless, one-eyed monsters, who are known as the *μούρηματα*. We also meet with a being possessing the attributes and functions of Pan, and even the name of Panos or Panios was reported to the author as existing in Zante for the patron spirit of goats who dwells in the mountain gorges, though he judiciously hesitates to accept this as a fact without more certain evidence. Similarly, in offerings which on certain occasions are made to the Nereids, it is customary for the giver, after presenting them, to hasten away without looking back, as we know from Sophocles and Virgil was the case in ancient times. And as these spirits are regarded as exercising their malignant influence especially at midday, in the neighbourhood of springs, and under the shade of certain trees of which the plane was one, these circumstances are adduced as illustrating the passage in Plato's *Phaedrus*, where Socrates

speaks of the possibility of his becoming *μυφόλυπτος*, and the reader is reminded that all these conditions were present on that occasion.

Besides these details which are either new or have not been much noticed hitherto, there are also a number of mythological personages whom M. Schmidt has brought to light for the first time. Such are the Drymiae, who are only known in parts of Greece, and correspond to the ancient Dryads, though they have also a partial resemblance to the nymph Echo, as they are believed to be spiteful towards those who make reverberations in the mountains. Such is also the Sea-spirit, a compound of Nereus and Poseidon, who is represented as riding on dolphins with a trident in his hand, and having a fish's tail; and the Lame-spirit, the most dangerous and injurious of all the fiends. Here also we first learn of the existence of a Charontissa, or wife of Charon, a modern Proserpine, who rules by her husband's side in Hades, and performs the milder office of comforting the departed spirits when they first arrive in the realms below. It is also a point of some importance that while hitherto the Charon of the modern Greeks has only been known as the hunter of men's lives and the jailor of the dead, he is now discovered to be regarded in some places as the ferryman of the infernal river, and his boat is spoken of, and the passage-money which he demands. This last point had already been rendered probable by the term *περάτικη*, applied to the custom of placing a piece of money in the mouth of the corpse, which until lately was commonly practised, and even now is found in some parts of the country.

Perhaps the most interesting section of the work that has appeared is the part which relates to God and the saints, and the way in which the attributes of heathen divinities have been transferred to them. In his collection of Popular Tales, the author promises to present us with a story in which the combat of Zeus with the giants is attributed to the Christian God. Not a little remarkable is it that the modern Cretans make use of the invocation *Zώνε Θεέ*, and on the sides of Parnassus the exclamation "God of Crete" is used to express incredulity, which seems exactly to correspond to a statement of Origen, who said that the early Christians were accused of ridiculing the worshippers of Zeus, because the burial-place of the god was shown in Crete. In connection with Mt. Olympus, round which many modern superstitions centre, M. Schmidt might have noticed the remarkable fact that all the monasteries on that mountain are dedicated to the Holy Trinity, and this circumstance is very probably connected with its having been the special abode of the highest of the heathen deities. With regard to the summit of the mountain, which is described in the popular songs as "the triple peak of heaven," and is regarded as the dwelling-place of the Fates, he might have mentioned that a reference seems here to be made to the three highest points, which are known to the inhabitants of Olympus as "the Three Brethren" (*τὰ τρία ἀδέλφα*). The author remarks (p. 69) that he cannot find any certain evidence of votive offerings having been made in ancient times after some special deliverance, containing an emblematic reference to the origin of the vow: we would suggest that the figure of Arion on the dolphin at Taenarum was probably of such a character. Again, we do not think M. Schmidt, in tracing the connection between the ancient and modern religion, has sufficiently taken into account the great number of ancient shrines and holy places which are now entirely deserted, and have not been replaced by any Christian place of worship, offering thereby a marked contrast to what took place in Italy, and testifying to the same struggle in which the name *Ἐλλῆν* became identified with "pagan," and was replaced by that of *Πορφαῖος*. No doubt the Parthenon may

have been purposely converted into a sanctuary of the Virgin Mother of Christ, and that of Theseus into a church of the Christian warrior St. George; and it may not be accident that a religious festival accompanied by dancing is celebrated on the top of Mt. Ithome at the present day, just as it was in ancient times in honour of Zeus; but these are rare exceptions, and in the great majority of instances there is reason to believe that the ancient temples were placed under a ban. We believe also that M. Schmidt is right in not connecting the *cultus* of the Prophet Elias as the patron of high places with the worship of Helios, because of the comparatively few mountains on which there were shrines of that god; and he very properly derives this function which the Greek Church has assigned to the Prophet, not, as has often been thought, from the sacrifice on Carmel, but from his ascent into heaven: this, we may remark, is confirmed by the Russian legends which identify him with the god of thunder. We might add many more subjects of interest which are illustrated by the work before us, but we hope we have said enough to persuade our readers to peruse it for themselves, and to those who do so we can promise an ample store of curious and valuable information.

H. F. TOZER.

The Gospel of a Poor Soul. [Das Evangelium einer armen Seele.
Mit einem Vorwort von Hermann Lotze.] Leipzig: S. Hirzel,
1871.

WITHOUT being really important, this little book is extremely suggestive and extremely interesting, for it is hardly too much to say that in it what many consider the dominant religious movement of the day crystallises for the first time into something clear and tangible. There are many besides Dr. Arnold who wish to retain religion to light up morality, and hold that all beyond this is mischievous and misleading, and for these "the Poor Soul" who parades her self-pity with overmuch complacency has wrought out a coherent theology with a definite basis in the actual experience of the spiritual life. Much skill is shown in working out the system so as to account for as much as possible, and at the same time to avoid all possibility of collision with positive knowledge and the facts of the world. In this way it would be possible for any one who had once lost sight of the arbitrary character of the starting point to be consoled and elevated and strengthened by the theory throughout life, and very little disturbed by finding that he uniformly failed to convince others of its truth.

The Soul begins with the observation that people often pray and do not receive what they pray for, and that this sometimes happens even when it seems that they would be better for receiving it, and this observation awakens her first doubts which she endeavours to combat with the usual pious sedatives. Then she (according to F. W. Newman, the soul is never perfect till she is a woman, though this particular soul seems to have been originally meant for a man) experiences for the first time the insurrection of the animal nature. In the combat she discovers the necessity of holding fast to God, without Whom her resolution would, it seems, have given way, though without inflexible resolution it is useless to call upon God. This experience is the foundation of all that is to follow; it is the writer's only criterion for fixing the conception of God and for establishing its validity. The ecstasy which followed this first victory is put aside as purely subjective, and the soul proceeds to meditate on the three possible ends of human life, sensual pleasure, intellectual enjoyment, and active love, and chooses the last, which seems to be synonymous with spontaneous beneficence. The choice is quite independent of any consideration of the complex capacities of the human mind, or

of the conditions which control the course of human life. Its grounds are so ideal as to be hard to seize ; although they are repeated many times in the course of a short book, it is hard to be sure that the following statement is fair. If we imagine the Soul in the full enjoyment of sensual or intellectual pleasure, she might still ask, Was it worth while to have been born for this ? and the question would be unanswerable ; but active love can always answer that it is worth while to have been born for others. If this be correct, it is obvious that the decision is taken in a mood which cannot be habitual. However, the Soul perceives that it was her resolve not to lose sight of this, the true end of life, that led her to cling to God, and as she has gained strength from Him for this, she concludes that He is, in His Essence, conscious, holy, hallowing Love, in the strength of Which we love. This, of course, is an effectual barrier against every pantheistic tendency, and according to the writer it has further consequences. There is much ingenuity in the discussion whether God can be the Creator of the world in general, or at any rate of the spirits who return His love, and nearly every creationist theory is examined in passing before both alternatives are dismissed. Though the argument proceeds rather in the dialectical than in the logical order, this does not really matter, for the object is simply to lay the ghosts of old prejudices ; the truth is sufficiently established by the simple reflections that if God be the Creator either of the world or of the spirits conditioned by the world, He must be something other than pure Love, and that unless this conception can be maintained as exclusive, it would obviously require to be limited and qualified ; but in experience the conception has been given without limitation. Here again the conclusiveness of the reasoning is open to discussion.

After this point the current of the Soul's thought is varied from time to time by colloquies with God. We will not say with a much more thorough-going mystic, St. John of the Cross, " all this that she says, Then I spake to God, then He spake to me, is pure nonsense ; " at best it is a game of chess, played blindfold, the right hand against the left, for kisses, in the glass. Her God generally keeps up to the highest average manner of the colloquies in books of devotion ; but we are reminded by His lengthy expositions, of the heathen who think to be heard for their much speaking ; partly, no doubt, because books of devotion are read for edification, while the *Gospel of the Poor Soul* will be chiefly read for curiosity ; partly, too, because books of devotion are occupied with the inculcation of a complicated series of thoughts, not of a single striking conception.

The belief in God as the Creator is referred to the fact that the false ends of life are more often pursued than the true, and therefore any popular piety will represent God as controlling the conditions of their attainment ; the writer is specially anxious to maintain that the dogma of creation is neither a necessary nor an adequate guarantee of reverence.

As the Soul is capable of love, freedom is a condition, though a transient one, of her blessedness ; as God is love, the absence of freedom is involved in the idea of His. His blessedness depends solely upon His readiness to help when opportunity offers : before the world had brought souls to consciousness, it was complete—it is not impaired by sin. Such, too, is the blessedness of the souls which sincerely choose love as the law of life, however late : they exist from eternity like everything else in the world in their germs and elements (a curious phrase, which must have a meaning, as it is repeated so often), but they only attain to consciousness through bodily life ; having once attained to consciousness, God can maintain them in knowledge and love

of Him if they have lived to Him (it is not stated that He can make them partakers of His power to help the living, or to translate the author's view into Christian language, the saints see God, they do not reign with Him) : those who have not lived to Him are dead to Him for ever. This is His judgment and their only hell : they sink back into the unconscious "rudiments of the world." Only those capable of choosing deliberately between the three ends can reach everlasting life : this excludes children, idiots, and lunatics ; but not savages, who are credited with a knowledge of the evil of selfishness, because they object to suffer from it. All positive religions are indifferent except so far as they help or hinder the recognition that God or the gods must be love, for with the disappearance of the dogma of Creation all the ordinary objections, religious and intellectual, to polytheism disappear. The speculative superiority of monotheism is rested on the uniformity of the divine action on the soul, which would be a better ground for inferring the essential similarity of all spirits who have once been made perfect in love. The writer's criticism of Christianity is, as might be expected, crude and perfunctory : as the method of his theology excludes a philosophy of nature or history, its value for him in no degree depends on the truth or falsehood of its supernatural claims, which are rejected on the ground that Christ foretold His second coming as immediate, that His miracles were intended as proofs of a commission from the Creator, and that the beneficent achievements of science do far more than isolated wonders to transform the material world into the Kingdom of God.

We have described this curious system at length because it is impossible to read the book without forming a high opinion of the moral and intellectual power that went to writing it ; the influence of such books is in reality an affair rather of fortune than of merit : if a visitor from another planet, who had read the Bible, were to read the *Gospel of a Poor Soul*, the *Patience of Hope*, *The Soul*, and *Ecce Homo*, he would not share the decisive preference of the British public for the last—all would interest or fatigue him alike.

Of course the division of the three ends of life is arbitrary and inadequate : the majority of mankind (as the writer of the beautiful chapter on the natural man in youth, manhood, and old age should have known) go through life without being guided by any end at all ; they are like donkeys moving round and round to turn a capstan ; they are beaten if they stop, but if they keep moving, they may browse on the right hand or the left, it matters to nobody, not even in this world, to them. The few to whom an ideal end is a necessity, or a comfort, or a luxury, commonly conceive it in many ways ; their own desires have wavered ; they know that other men desire other things : if theists, they look to God to satisfy, in some transcendental way, all desires which they do not disapprove. It is a serious defect of the system that though the conscious soul is represented as a product of the world, it seems to have no duties to it and no interest in it. Those who, like the author, are reasonably disposed to elevate the postulates of the moral and spiritual life to the rank of speculative intellectual axioms will hardly be disposed to accept this God, Who can only help those whose will is fixed, to make shipwreck of earthly life rather than forsake Him instead of the traditional Father, Who is always more ready to hear than we to pray, Who is wont to give more than we desire or deserve, Who will not break the bruised reed or quench the smoking flax. Those who are satisfied to live according to their ordinary selves will readily make the not recondite observation that the influence of an ideal upon those who cling to it is no guarantee of its independent objective existence for others.

G. A. SIMCOX.

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LITERARY NOTES.

In Westermann's *Monatshefte* for January, Freiherr von Maltzan corrects the common erroneous impression that *café noir* is the orthodox Arabian beverage and *café au lait* a Western corruption. On the contrary, the Bedouins of South Arabia, the oldest coffee country in the world (except Abyssinia), have assured him that the full flavour and aroma of the coffee is only to be brought out by the addition of milk; and their connoisseurship is beyond dispute. Von Maltzan thinks the usage depends upon climate; the natives of the hottest lowlands do not drink what we call coffee at all, but an infusion of the pod or bush containing the beans, which is called *gischer*, and is less stimulating than coffee, while it has the same aroma. Its qualities are lost in transport, or it would be a valuable substitute for chicory and other adulterating ingredients.

The Punch of Munich, edited by Dr. Martin Schleich, has ceased to exist. It was once one of the most popular and widely circulated of comic illustrated journals. In its place appears every Saturday *Die Bremse*, edited by Dr. Sigl, editor of the *Vaterland*.

In *Im Neuen Reich* (January 5) Gustav Freytag addresses some advice "to young novelists," which, as he says, is not new, but might be serviceable to his countrymen (and women) if they would give it their attention. He complains that most writers invent their characters first, and that with little regard to nature and reality, and then frame a plot to bring out the idiosyncrasies of the being they have imagined. He adds that the art of inventing and telling a coherent story has at no time appeared to thrive in Germany, but hopes it is never too late to mend.—In the same paper (January 12) Mich. Bernays represents Uhland in the new character of a student of ancient German literature and legend, and explains by his devotion to these researches the poetical unproductiveness of the latter half of his long and peaceful life. Uhland was fastidious, and refused to publish fragmentary notices while he failed to complete an elaborate work to his own satisfaction. Seven volumes, to be followed by an eighth, testify to his industry; and though most of his facts have been anticipated now, they have not been presented in a more attractive form, nor in one which preserves better the proportions of the subject as a whole.

The *Rédaction* of the *Revue des deux Mondes* is going shortly to publish an index, which can scarcely fail to be an interesting contribution to literary history, as it will apparently include notices of the authorship and circumstances under which the more remarkable articles appeared during the forty-two years that the *Revue* has been identified with the best literary workmanship in France.

Art and Archaeology.

Pictures by Daniel Maclise, R.A., with Descriptions and Biographical Sketch of the Painter by James Dafforne. Virtue and Co.

Pictures by C. R. Leslie, R.A., &c.

THESE two books are produced in the same manner, and are, indeed, intended to be companion volumes, so that we can with propriety notice them together. A series of engravings from the works of a deceased master in his art published in this style appears to be exactly the right way to celebrate our leading artists as they pass from the stage. An exhibition of their collected works, as after Etty's death at the Society of Arts, or two years ago those of Leslie at the Royal Academy, is very interesting to those who have the chance of visiting such exhibitions, and to the critic is inestimable, preparing for him the opportunity of deciding for ever after the relative position of the painter whose works are so collected. But for the public, the few months that such collection remains together soon pass without any record, while such volumes as these remain in some sense a monument to the artist. Viewed in this way, we should have the best examples given—the works that made the

master's reputation; otherwise the monument will not be just to his fame. In the Leslie volume we think this is the case, as we have "Sancho and the Duchess," "Autolycus," "Perdita," and two of his best subjects from Molière; but Maclise is not so lucky, and he it was we hoped to find most worthily represented. The memoirs of both artists are exceedingly well related; but here, again, the man who celebrated the arms of Britain in the two greatest historical pictures of our epoch, perhaps the two greatest contemporary historical pictures in the history of art, does not find so large an acknowledgment at the hand of Mr. Dafforne as he deserved. The seventy or eighty portraits of the literary men of the day published in *Fraser's Magazine** are not mentioned, as they are not in Mr. O'Driscoll's volume, necessarily Mr. Dafforne's authority; and the two great pictures in the Houses of Parliament are but scantly treated. All the engravings given are of his smaller exhibition pictures, including, however, the play scene in *Hamlet*, now in our National Gallery. Wherever the female element predominated, Maclise failed. The meretricious beauty, which at this short distance of time we already see was common property to Etty, Leslie, Maclise, and their followers, and which, we think, was derived from the deadly artifice of Chalon, is more destructive to him than to the others. Where men only appear, or women but very little, as in the "Bohemian Gipsies," or the "Marriage of Strongbow," his romance is heroic and splendid; and where he worked under a living motive, as in the "Wellington and Blücher" at Westminster, he must be acknowledged without a rival.

W. B. SCOTT.

ART NOTES.

Mr. Crowe, the joint author with Signor Cavalcaselle of the *History of Italian Painting*, writes to us to complain that a writer in the current number of the *Edinburgh Review*—

"has attempted to create a distinction between the two persons whose names appear on the title-page of that work, against which they feel entitled to protest. The critic speaks of one of the authors as having had the mere labour of giving form and order to the materials of the other. He speaks of the latter as *the author*, and gives him qualifications denied to his partner. These statements convey an impression altogether contrary to the reality, and the *History of Italian Painting* is, as it purports to be, in every sense the work of two partners, *both* of whom are men of education and special knowledge of art, good draughtsmen, and travelled artists."

We may add that the article, though highly favourable to the book, contains a number of other inaccuracies, in the smaller matters of date, spelling, &c., which render the claim of the writer to differ on points of this nature with two such accomplished experts as Messrs. Crowe and Cavalcaselle singularly out of place.

On Wednesday evening, January 24, an exhibition, now open to the public, was inaugurated at South Kensington Museum, by a "private view," at which a good many hundred well-dressed people assisted. This exhibition consists of the mass of productions of ornamental art, gifts for the most part, collected by the Duke of Edinburgh in his voyage round the world in the *Galatea*, spoils of the chase and of the rifle at sea and on shore, and the more personal records of the prince's progress, in the shape of illuminated addresses, not only written on vellum and paper, but engraved on hinged silver like triptychs, fancy trowels, and so on. Besides all these, the two series of water-colour drawings by Messrs. Brierly and Chevalier, able draughtsmen who accompanied the prince, form an exceedingly interesting collection of illustrations of the natural scenery visited and adventures taking place during the varied expedition. Arms and dresses there are a good many, but the most deserving of record are the bronzes, enamels (*cloisonné*, said to be) from China and Japan. A large ornamental bronze incense-burner in three stages, from the latter country, presented by the Mikado,

* See *Academy*, vol. ii. p. 217.

is perhaps the most perfect work of the kind yet brought over. The gold embroidered textiles, carpets, kincobs, &c. given by the Maharajah of Jummoo, the City of Benares, &c. are also remarkable.

The First Commissioner of Works has received from the Berlin government an invitation to British architects to compete for the new Houses of Parliament in that city. Architects of other nations are also invited. The designs must be sent in at latest by the 15th of April. Completely worked-out building plans are, of course, not expected. It was mentioned in the *Beiblatt to the Zeitschrift für bildende Kunst* for December 1, 1871, that when the Reichstag accepted the report of the first commission appointed to consider this subject, the condition was added that the competition should be limited to Germans.

A necropolis of the Gallo-Roman epoch has been discovered at Bingen. Vases, urns, lamps, &c. abound.

All the collections of Prince Napoleon will be brought to the hammer at Christie's during the spring.

The *Chronique des Arts* for December 24, 1871, announces that new tombs have been brought to light at Athens, amongst others a funeral monument ornamented by a fine bas-relief representing two female figures larger than life, one seated, the other standing. Excavations have also been undertaken in the environs of the so-called portico of the Eponymi. The result appears to throw discredit on the theory in accordance with which the portico was named. The colossal statues found, of which three are yet preserved, make up but four in all. They supported, after the fashion of caryatidae, the entablature of an edifice of which both the name and purpose for the present must remain in doubt.

Mr. Watts, R.A., will send to the exhibition of the Royal Academy three portraits: two of brother artists, viz. Mr. Calderon and Mr. Val. Prinsep, and one of Miss Dalrymple. At present he is engaged chiefly on a large work which he intends to offer as his diploma picture, and which will also appear in May on the walls of Burlington House. It is decorative in character, the subject is the murder of Abel. The figure of Cain fills the centre, at his feet lies the prostrate body of Abel. The spirits who, rising to heaven, were embodying the aspirations of the sacrifice, changed by the act of Cain into avenging demons, sweep back from on high. The picture is yet in the first stages of progress, but there are signs of that desire to pass beyond the trivial and commonplace, and to get at a poetic and dignified side, which is invariably characteristic of Mr. Watts, even when his work is in other respects incomplete. In the present instance the crowning point of the composition is the figure of Cain, the strong man, whose power is appalled, by the weight of retribution. The subject, too, has been happily chosen, as, although to a certain extent susceptible of allegorical interpretation, it does not pass beyond the limits of that which is easily intelligible.

The bas-relief representing Henry IV. on horseback, which was torn down from the Hôtel de Ville of Paris by the Communists, has been found. This important work had been broken up, but all the fragments have been collected, and it will be possible to restore it perfectly.

A bust of the late Mr. Grote, by the sculptor Charles Bacon, has been placed in Westminster Abbey.

The Musée of Brussels has just acquired a fine portrait of an old man by the vigorous hand of Bernardo Strozzi, the chief of the Genoese school, commonly called Il Capucino. At the same time a superb example of Benjamin Cuyp, a portrait of a young woman, has been presented to the Musée of Lille by M. Louis Decamps, who has also enriched the collection by the gift of the only known picture by J.-B. Wackis, a Dutch painter of the seventeenth century, now so forgotten that his name is not even cited by those writers who have specially occupied themselves with the art of the Netherlands. The picture in question, the subject of which is a vase of flowers, is said to have very high

merit. M. Decamps has quite recently presented to the same Musée six fine drawings by Calamatta, Flers, Troyon, Decamps, Raffet, and Charles Jacque.

A statue of Sir Bartle Frere will be sent by Mr. Woolner, A.R.A., to the forthcoming exhibition of the Royal Academy. The head is admirable, both in point of likeness and execution, the modern costume handled with skill and much success. Yet the general impression is scarcely satisfactory, the figure fails to seem informed by a clear grasp of the man as a whole. In short, Mr. Woolner still falls somewhat short of the very high standard he is always expected to reach. "Guinevere," commissioned by Mr. Kirkman-Hodgson as a companion statuette to the "Elaine," previously exhibited, will also be seen at the Academy. Mr. Woolner's reading of the character is voluptuous rather than passionate, the queen is what Diderot called a *belle indolante*.

The magnificent collection of modern pictures brought together by M. Paturle, and which have been since his death the property of his widow, will be sold towards the end of February at the Hôtel Drouot. At the same time and place the collection of M. Michel Tretaigne will be brought to the hammer. The well-known gallery of MM. Péreire is also about to be sold by auction. The works of Ary Scheffer, Delacroix, Ingres, Meissonier, are here mingled with capital examples of Ostade, Terburg, Ruysdaël, Hobbema, Franz Hals, and Rembrandt. The prospect of the immediate dispersion of this collection is exciting the art world of Paris.

The Administration des Beaux-Arts has recently purchased for the Luxembourg two paintings by Henri Regnault, both of which were exhibited last year in London, viz. "Le Décapité," and the equestrian portrait of General Prim.

The January number of the *Gazette des Beaux-Arts* contains a sketch of the life of Regnault, by Paul Mantz, accompanied by an excellent etching of his powerful and repulsive "Salome" exhibited at the Salon of 1870. The article entitled "Les Musées, les Arts et les Artistes pendant la Commune" is valuable as a piece of contemporary history. The documents are given in full. In a paper headed "Les Faïences de Philippe le Hardi," M. J. Houday announces the discovery of certain fragments of *carreaux émaillés* on the site of the south tower of the castle of Hesdin. This is important as corroborating a theory put forward by him in his *Histoire de la Céramique lilloise*, to the effect that faience was fabricated in Flanders and Artois as early as the close of the fourteenth century. Additional confirmation will also be found in the items of an inventory dated 1452, which he gives at full length.

In the *Times* of January 18, Mr. Robinson replies to the second letter of "C." (*Times*, January 12) on the subject of the "Uncatalogued Masterpiece." Firstly, the predominance of fair types in the personages does not argue a non-Peninsular origin; for the majority of the figures are actual portraits of the reigning king and his family, one of whom, a daughter, who became the wife of the Emperor Charles V., is painted by Titian in "La Gloria" as a woman of a delicate pale complexion, slight hectic blush, and with abundant golden hair. Secondly, "C." having described the weeds of the foreground as plants rare in the Peninsula, specifies one, "the wild columbine," which is common there. Thirdly, supposing that a monogram exists, it would be more likely to occur on work of Spanish or Portuguese origin than on a Flemish picture, as early Flemish artists were not in the habit of signing their paintings. Fourthly, even if the landscape background showed a northern country (which Mr. Robinson doubts), it should be remembered that early painters often showed a strong predilection for representing in their backgrounds the scenery of lands foreign to them. Fifthly, the red cow, which is noted by "C." as of a colour unusual in the Peninsula, finds a companion in a red bull which occurs in a fine illumination preceding the Office for the Dead, in a manuscript "Book of Hours," which belonged to Alfonso V., King of Arragon. The book, which is in the possession

of Mr. Robinson, was executed about 1442. In respect of the wheeled plough, who shall say that in Dom Emmanuel's time such a thing was unknown in Portugal?

The *Bullettino dell' Instituto*, &c. (December) contains an account by Lanciani of the recent excavations round the three columns of the Temple of Castor. The most curious thing is the discovery of the deep springs which once fed the *Lacus Curtius*, and which are noticed in several of the old MS. descriptions of earlier excavations to which Lanciani refers. There is some hope that further remains of the *Fasti Capitolini* may be found, which on one theory were attached to the walls of this temple—a temple in which the senate not unfrequently met. The depression of the *cella* below the level of the outer part of the temple is also commented on.

The *Revue archéologique* (December) contains an article by Maspero on the stele of excommunications found at Napata, the capital of Ethiopia; and an account of the Temple of Augustus at Ancyra in Phrygia, by the architect of the French exploring expedition to Galatia (the 24th and last part of their great work is just being published).—An ancient caricature of Ganymede on a Roman lamp now in the Louvre is described.—Ruelle announces that he has been able to take a complete list of the Greek MSS. in the chapter library at Toledo.

The *British and Foreign Evangelical Review* (Quarterly—Edinburgh), January 1872 ("On Ephesus and the Temple of Diana," by Alexander S. Murray), reviews Guhl's *Ephesiaca* and Falkener's *Ephesus*, and gives an accurate and most readable history of Ephesus and its site from the earliest times to the present hour, concluding with an account of Mr. Wood's excavations now in progress on the site of the famous temple.

A portrait of Sir Philip Francis, by Lonsdale, has been lately added by the Trustees to the National Portrait Gallery in Exhibition Road, South Kensington. It is, apparently, the original of the well-known engraved portrait which fronts the title-page in Mr. Taylor's *Junius Identified*.

Dr. Curtius sends to the first number of the *Preussische Jahrbücher* (January 11) a short account of his visit to Asia Minor and Greece, together with some fresh inscriptions discovered by himself and his companions. He undertakes to make public, with as little delay as possible, the topographical and other results of his expedition.

As a musical event of considerable importance last Saturday we have to record the performance of Liszt's Concerto in E♭ at the Crystal Palace by Mr. Dannreuther. The enthusiastic reception of the work by the audience, equally due to its intrinsic value and to the excellent performance, showed once more the sympathetic feeling of the English public for the productions of the modern German school. This favourable result is even more conclusive than the success the same concerto met with at Mr. Baché's concert last season, where the Liszt worshippers had assembled in full force, while this time the work had to appeal to the miscellaneous elements of the public in general. Mr. Dannreuther's rendering was highly praiseworthy in most respects. He had grasped the poetic meaning of Liszt's music with rare felicity, and mastered the immense technical difficulties of the work to a considerable extent. We remember having heard the same work rendered by Tausig, the lately deceased king of his instrument. He was certainly superior to the London performer in the infallible correctness and appalling brilliancy of his play, but by no means as far as touch and expression are concerned. The double turn in the slargando movement was given by Mr. Dannreuther with the most delicate and graceful dolcissimo; and equal praise was due to the rendering of the theme of the adagio with its arpeggio-like accompaniment. The orchestral part was upon the whole, and considering the difficulties of the work, satisfactory. Here and there it seemed wanting in the delicacy and discretion so necessary and difficult to acquire with the complicated machinery of our

modern orchestra. There also occurred some slight mistakes in the single instruments, one passage, for instance, of the horn being (if we may trust our memory, unassisted as it was by the score) missed entirely. In the first movement Mr. Manns ought to have illustrated the rhythmical accents with stronger touches. The theme—



which Liszt by the bye has also used in his setting of Lenau's ballad *Die drei Zigeuner*, is unmistakably of Hungarian or rather gipsy origin, and depends, like all the tunes of this nation, for its effect entirely on its force and originality of rhythm. Mr. Manns' conception seemed to us much too subdued in the contrasts of light and shade. About the work itself we have spoken on a former occasion (see *Academy*, vol. ii. p. 282). We repeat here that its merits rest less upon original invention than on the consistent carrying out of a poetical idea. In this respect it is very valuable as showing that even without a rich flow of melodious spontaneity, the mere dramatic force of the original conception, and its gradual rise to the climax of pathos, can engender works of the highest beauty in music.

We hope that the brilliant success of Liszt's work may encourage the authorities of the Saturday Concerts to further attempts at a more frequent introduction of modern German works into their programmes.

F. HÜFFER.

New Publications.

ANNIE, "An Excellent Person." By E. S. Maine. Smith, Elder, and Co.

ELZE, Carl. A Biography of Lord Byron, with a Critical Essay on his Place in Literature. Translated from the German with Notes. Murray.

FELSING, J. Der literarische Streit üb. die beiden Bilder in Dresden u. Darmstadt genannt Madonna d. Bürgermeisters Meyer. Leipzig : Vogel.

FRÖHNER, W. Deux Peintures de Vases grecs de la Nécropole de Kameiros. Fol. Paris : Baur et Detaille.

SCHASLER, Max. Ästhetik als Philosophie des Schönen u. der Kunst. I. Bd. 4. Lfg. Berlin : Nicolai.

SCOTT, W. B. The British School of Sculpture: illustrated by 20 steel engravings and 50 woodcuts. Virtue and Co.

SEBASTIAN BRANDS Narrenschiff in neuhochdeutscher Uebertragung von Karl Simrock. Mit den Holzschnitten der ersten Ausgaben u. dem Bildnisse Brands aus Reusners Icones. Berlin : Lipperheide.

Theology.

A Catena of Buddhist Scriptures from the Chinese. By Samuel Beal. Trübner and Co.

THIS volume is, with regard to Chinese Buddhism, what Mr. Spence Hardy's work, *A Manual of Buddhism*, is to Singhalese Buddhism; it corresponds also to what M. E. Schlagintweit has done for Thibetan Buddhism in his book entitled *Buddhism in Thibet*. In the work before us Mr. Beal speaks but little himself; explanation and discussion occupy but the smallest of spaces. His great object is to let the Chinese Buddhist authors speak; he hides himself, as it were, behind them; and his personal work consists (besides the important and essential work of translation) in the arrangement of the different parts, and in the art by means of which he has bound them together, and has collected into one whole fragments gathered here and there.

Several of the writings quoted in this work have already appeared scattered through different numbers of the *Journal of the Royal Asiatic Society*. The author has had the happy thought of collecting them, of linking them together, and of completing them by several new translations in such a

manner as to form of the whole, that which he rightly entitles : *A Catena of Buddhist Scriptures from the Chinese*. We will not ask whether Mr. Beal has always made the happiest selection among the Buddhist literature of China ; it did not perhaps depend on him to make a perfectly free choice ; and it must be a chance whether an author falls on the most interesting works when he draws from a collection which "includes 1440 distinct works comprising 5586 books." Mr. Beal gives us, besides, to understand that he has not had all the facilities desirable for making very deep researches. We accept what he offers us, without complaining too bitterly in the cases where we might clearly have wished for, or expected, other things.

After some introductory remarks (1-9) in which the author insists on the help which the study of Chinese Buddhism gives to that of Indian Buddhism, on the external relations of certain institutions of Christianity and Buddhism, and finally on the necessity of being acquainted with the Buddhist religion, to act efficaciously on the minds of those who profess it, and clearly to understand the part which it plays and the place which it occupies in the "Divine strategy employed in the education of the world" (p. 7), the author enters upon his subject. His book is divided into five parts :—I. Legends and Myths. II. Buddhism as a Religion. III. Scholastic Period. IV. Mystic Period. V. Decline and Fall. A general index and an index of proper names, the latter being composed exclusively of Chinese names with the Sanskrit equivalent or a short explanation in English, terminate the book. We will proceed to give a notice of the different parts, adding to this summary some remarks.

I. The first part rests on two Chinese works, the Fah-kai-on-lih-to, which Mr. Beal translates "The Buddhist Kosmos, illustrated," and the Shing-Tau-ki, or Memorials of the complete inspiration of Tathāgata, with an account of Buddha Čakryamuni. It is perhaps not very natural to place under one heading two works, one of which is the description of a fantastic world, while the other, notwithstanding the many legends it contains, depends on an historical fact. The remarks with which Mr. Beal prefaces this section prove that he has felt the difficulty ; therefore we will not blame him for an arrangement which was perhaps inevitable. Mr. Beal also observes that these two works belong to the Swābhāvika school, the ruling one in China, which teaches the eternity of matter and leads to Pantheism. Both these books are comparatively modern, and, moreover, they are very evidently reproductions. This is specially true of the first, the author of which is well known to be Jin-ch'au : he himself gives the date of his work (A.D. 1127) ; he treats of a subject which has nothing primitive about it ; for it was not in the early times of Buddhism that its followers thought of creating a world as complicated as it is imaginary ; and lastly, his book bristles with quotations borrowed from a great number of different works, which only render it the more valuable. It is curious to notice, at the opening of this book, the efforts which the author makes to demonstrate the superiority of India, and in particular the special right of the peninsula to the title of "middle country," by which the Chinese are wont to designate their own land (p. 16). But we cannot pause on all the details of the work of Jin-ch'au, on all the inventions by which the imagination of the Hindoo plays across the Unknown in time and space ; we will not attempt to enumerate here the thirty-two stages of the Heavens, nor the eight burning and the eight cold Hells, nor the fields of Buddha, nor the Kalpas, or almost immeasurable periods of time. We will draw attention to a few points only.

In the midst of all these vagaries we find several times

mentioned the *Karma** (particularly at pages 34, 40, 86). This is explained by the close and necessary connection which Buddhism establishes between moral actions and the external condition of beings. From the moment that an almost infinite variety of worlds is admitted, these worlds must be peopled according to the consequences of the *Karma*. Buddhism entirely subordinates the physical to the moral world, and the whole system of the Buddhist world was perhaps only invented to correspond to the development of the doctrine of the *Karma*.

There is another point we must notice which is still more important, because it concerns the usefulness of Mr. Beal's work with regard to Buddhist studies considered as a whole. The Chinese author borrows continually from works of which he quotes the titles, sometimes in the Sanskrit form (which proves that he is sure of their identification), sometimes in the Chinese form, but giving either the English translation or the more or less certain Sanskrit equivalent. Now what is important, according to our views, would be to know whether the works of which he speaks correspond with known and existing works in Sanskrit, Thibetan, or Pāli.

On this point Mr. Beal gives us no sufficient enlightenment. It may have been impossible for him to do otherwise, at least in the greater number of cases ; for special researches would have been necessary for the purpose : we simply state the fact. When we find quoted the Avatamsaka-sūtra, we identify it at first sight with the Thibetan work in the Bka'-gyur, which bears that title ; it remains to be proved whether the two works coincide. When Mr. Beal quotes the Karunika-mahā-rāja-sūtra, and gives the Chinese title Jin-wang-king, we cannot doubt the exactness of its Sanskrit translation (although the word mahā is not represented in the Chinese) ; but knowing that there are in the literatures of Nepaul and of Thibet two Sūtras, entitled *Karunā*—and Mahā-karunā-pundarīka-sūtra, we see that the title of the Chinese work is not the exact equivalent of that of the two others, and we are led to ask ourselves whether we have to do with a third work, either no longer extant or not extant in other Buddhist literatures. With regard to the In-pen Sūtra, Mr. Beal gives us with hesitation the Sanskrit equivalent Mahā-nidāna-sūtra, warning us in this manner that the identification needs confirmation. It is the same with the translation *Pinda-dhana*, which he proposes for the work named Lau-tan (p. 47) ; but here it is probable that Mr. Beal has himself altered his own Sanskrit translation, and that we ought to read *Pinda-dāna*, which means, "a gift of balls of rice"—alms.

The translation "The Sūtra of Creation" from the Chinese Hi-shai-king, for which Mr. Beal gives in his index Shrishti-Khanda with a note of interrogation (?), shows the same uncertainty. These examples will serve to show that there is much yet to be done to prove the relations which exist between the Buddhist books of China and those of India and Thibet. Mr. Beal has felt himself hampered by this difficulty, and has had neither the time nor the means to solve it. It is only by examining and comparing the different literatures that the truth will be discovered. A mere translation of titles, however learnedly made, can but produce uncertain results.

While on the subject of Sanskrit words in Mr. Beal's work, we must remark that they are often defective. The word which he writes Shrishti-Khanda ought to be written Srishti-Khanda (or better still, Sr̥ṣti-Khaṇḍa) ; we also often meet with rājah and its plural rājahs with an h, which

* It is known that this term, which signifies "act," designates the actions of intelligent beings considered in their moral value, and in the inevitable consequences, which the law of justice attaches to them.

nothing can justify; we may say the same of the *y* in *Vijñâna*. We also remark variations in the orthography: why write *sanskâra* (p. 97) when in another place we read *sanskâra*, and when the *k* is usually substituted for *c*? We will not carry these remarks any further. It is not surprising that Mr. Beal, being a Chinese and not a Sanskrit scholar, should often wrongly spell Sanskrit words; the fault is attributable rather to Sanskrit scholars themselves. When they have agreed upon the system of transcription to be adopted for the language which they make their special study, they may perhaps have a right to blame those who do not make it their special study for denaturalising words through faulty orthography.

The second chapter of the first section is, as we have already said, upon the life of Câkyamuni. The Chinese work which deserves best to be known upon this subject is the first edition of the *Lalita Vistara*; but it is not this which Mr. Beal offers us now. If he should at some future day be able to give us this, he will render an important service to Buddhist studies. In the mean time he puts before us the *Shing-tau-ki*, composed in the seventh century by Wong-Puh. "It is," says Mr. Beal, "probably a copy of the first records. It claims a semi-canonical authority as belonging to the traditional or *Smriti* class of works" (p. 130). It is true that this work has an ancient and primitive appearance; but its date is incontestably modern.

Mr. Beal has already given the translation of this book, and of a commentary upon it, in the 20th volume of the *Royal Asiatic Society* (part ii. 1863), and to this he refers the reader, as in the present work he omits the commentary. The simple translation of the work of Wong-Puh would be insufficient, and far too enigmatical, if it did not relate to a subject which has been already treated several times, from divers sources, and of which the *Asiatic Journal* offers, in the volume previously quoted, a more complete exposition.

The most original part of this chapter is the discussion by which it opens (pp. 126-130) upon the name Buddha Câkyamuni, which, according to Mr. Beal, might be of Scythian origin. The author lays much stress on the name Câkyâ, which bears no small resemblance to Câka, the (Persian) name for the Scythians, and on several other particulars which he interprets skilfully. I believe that Mr. Beal is not the first to bring forward this interesting theory, which is well worthy of examination. It is plain that the etymology attributed by the Indians to the word Câkyâ is purely fanciful (like many others), but if we are to believe that the Câkyas came from Scythia, we must fix their arrival in India at an earlier period than 623 or 625 B.C., the date proposed by Mr. Beal; for Câkyamuni, who died (according to the generally admitted Singhalese calculation) in 543, at the age of eighty, must have been born in 623; and it is difficult to believe that he belonged to a family newly arrived from Scythia. Indeed, and this is my strongest argument against Mr. Beal's theory, the founder of Buddhism, by his character, and the turn of his mind, appears to have been an Indian, a thorough Indian, a great deal too much of an Indian to have been a Scythian!

II. In the second section Mr. Beal commences by showing that Buddhism is really a religion, and he gives us to understand that Câkyamuni must have gone back to anterior traditions for his doctrines; which is as much as implicitly to recognise several historic Buddhas: a serious question, which cannot be decided by simple suppositions. The passages quoted at the close of this exposition are—firstly, the versified and well-known adages which contain the doctrine of Buddhism; secondly, some passages relating to the four Truths; thirdly, passages relating to the Nir-

vâna; fourthly and fifthly, the Sûtra of forty-two sections and the *Pratimôksha*, two important works, the translation of which has already appeared in the *Journal of the Royal Asiatic Society* (19th vol. 1st series); sixthly, the daily manual of the Shaman, an interesting collection of the actions and sacramental words required daily from a Buddhist monk; seventhly, passages relating to the school of Tiant'ai. All is not equally new, nor of equal importance, although all is interesting in this collection: we will notice specially the parts not previously published.

With regard to the four Truths, Mr. Beal gives us a fragment of the *Pari-nirvâna-sûtra*. We here find a very complete and detailed exposition of the first Truth, illustrated in all its parts by those examples which the Hindoos lavish with a fertility and a sagacity peculiar to themselves, but which do not always bring with them conviction. As the proverb says, "Comparaison n'est pas raison." The other three Truths are scarcely mentioned by name. But we must notice another omission still more to be regretted. It is true that every writing on the subject of the four Truths is worthy of attention, and a quotation from the Chinese *Pari-nirvâna* is all the more interesting, because this work, or a work of the same title, exists in the other Buddhist literatures. But on the subject of the four Truths, these same literatures offer us a particular book, a Sûtra which is the first discourse pronounced by Câkyamuni, and which is considered authentic, although each literature has its special version. Gogerly has given us the translation of the Pâli text (*Journal of the Ceylon Branch of the R. A. Soc.* No. 66). I may be allowed to remind the reader that I have myself translated or compared four versions of this primitive discourse (*Journal asiatique*, mai-juin, 1870). What does Chinese literature offer us on this point? Mr. Beal does not tell us, and yet it would be of the greatest¹ importance to discover. There is no doubt that one at least of these writings exists in Chinese; possibly all may exist in the Buddhist literature of the Celestial Empire. They might not be easily discovered, but they are worth the trouble of seeking. We call Mr. Beal's attention to this point.

It is again the *Pari-nirvâna-sûtra* which furnishes Mr. Beal with materials on the question of the Nirvâna. The author begins by telling us that Chinese works generally define Nirvâna as the *condition* in which there is neither birth nor death (p. 172), a perfectly true definition, but somewhat vague, as the point precisely is to know in what this condition consists. Mr. Beal remarks in two other places (pp. 276 and 281) that Buddhism proceeds by elimination: it denies one attribute, then a second, then a third, and so on until one scarcely knows what remains; and that which remains, if indeed there remains anything, it takes care not to define clearly. The Buddhists appear to try to contradict every affirmation by a negation, and to neutralise one assertion by another. They employ to the uttermost the essentially Buddhist rule of the *juste milieu*, which in certain cases, and especially in metaphysics, consists in advancing nothing, and in ruining every argument employed by another. Who could define clearly the Buddhist "true self," or "I," of which Buddha affirms that it is permanent, full of joy, personal, and pure? (p. 180). These terms seem to assert in a positive manner, the persistence of personality and identity in the Nirvâna: but the reasoning which led to this conclusion is far from creating clear ideas; and one cannot rest on this assertion only, fully to understand the nature of the Nirvâna, of that "silent extinction" (Tsihmieh, p. 172) which for some is a complete annihilation "vollständige Vernichtung" (Wassilief). One might conclude from the passages brought forward by Mr. Beal that

Chinese Buddhism rejects the annihilation-Nirvâna ; but these writings do not include the whole of Chinese Buddhism ; and it is very probable, if not certain, that the question has been solved in different ways by the Buddhists themselves. It is not easy to draw from contradictory assertions a certain and definite conclusion : *Adhuc sub judice lis est.*

With regard to the school of Tian-t'ai, which is a very important one in China, Mr. Beal gives us a description of the principal seat of this sect—an account of a visit to the central convent—also an analysis and partial translation of the principal work of its founder, Chi-kai (the end of the sixth century). This work, named Chi-kwan, or knowledge and meditation, presents the minute exactness which distinguishes Indian and especially Buddhist writers in the enumeration of all the parts of the subject treated, and in the determination of all the means it is necessary to use, most of which are remarkable only for their puerility.

III. With the third section we enter into the interminable sophistries of the Prajñâ-Pâramitâ, which forms in Thibetan literature so vast a compilation, yet which is capable of considerable abridgment, seeing that it may be entirely contained in the letter A.* Mr. Beal has already published in the *Journal of the R. As. Society* (New Series, vol. i. part i.) the translation of the Vajra-tchedika and of the Prajñâ-Pâramitâ-Hridaya ; he confines himself in his new work to short quotations from the former, but reproduces entirely the latter, which recapitulates in a felicitous manner the spirit and method of the Prajñâ-Pâramitâ, by collecting the principal topics of Buddhism, and by applying to them an inexorable system of negation. But the most novel and important part of this section is the translation of a long fragment of the Curaṅgama, which occupies 84 pages of the book, in small print, and reproduces about one-third of the original work. Mr. Beal seems to suppose that this Sûtra, which treats of the contemplation or ecstasy named Samadhi, may be the same as the Samâdhi-Râja : but there is nothing to authorise this supposition. The Samâdhi-Râja and the Curaṅgama both treat to all appearance of the same subject, but are two distinct works. In Thibetan, they may be found in the same volume (the 9th) in the section Mdo of the Bka'-gyur, the former at the beginning, the latter at the end of the volume, but neither the one nor the other forms part of the same section as the Prajñâ-Pâramitâ.

IV. In the fourth section (Mystic Period), the author, after a few words on the relations of mysticism with scholastic subtleties, sets forth the Buddhist mysticism, created by Aryadeva, a disciple of Nagardjuna, whose principal creations are Amitâbha and Avalokiteçvara. Amitâbha is the Dhyâni-Buddha (which one might call the mental reflection, the intellectual and mystic manifestation) of Çâkyamuni. Hence the honours paid to him in China and in Japan. The abode of this personage, as mystical and imaginary as himself, is Sukhavati. Mr. Beal enumerates the different ideas attached to the name or to the person of Amitâbha. "Boundless light," such is the sense of this word. To this notion is joined that of omnipresence, which may be rendered by the name of Vairochana (although this word does not appear to bear that meaning, and we doubt the correctness of the translation which Mr. Beal gives of it, "the Omnipresent," p. 373);† that of Eternity, to which the

Chinese appear specially to attach themselves, and which the name of Amitâbha appears to favour on account of the similarity between Amita, "immense," and Amrita, "immortal" (not Amrita, as we find in p. 373); and finally, that of Adi-Buddha, or the primordial Buddha. I admit that the Sanskrit term Adi-Buddha is, as Mr. Beal asserts, without sufficient proof, the equivalent of the Chinese yih-sin, "one form of existence" (p. 373), properly a single heart, or an only heart, the heart of unity. This word "heart" (one self), which is in the Sanskrit hridaya, shows in Amitâbha the inner self, and leads naturally to the idea of love and compassion, which are also some of the attributes of the Dhyâni-Buddha. But as self is manifested by speech, speech is also one of the attributes of Amitâbha : only under this form, he takes a distinct name and personality, and becomes a sort of "Word" (Logos) by the name of Avalokiteçvara (p. 314). It is therefore natural that Mr. Beal should pass on to this personage after giving two fragments relating to Amitâbha.

Neither in the text nor in the index of Mr. Beal's work do we find the translation of the title of the works from which these fragments are taken. The first, entitled Tsing-tu-wan, appears to signify "Description of the pure earth," and the two first terms seem to correspond with the Sanskrit Cuddha-bhumi : we know no Indian work of this name, but the Chinese work being a popular book, according to Mr. Beal, may perhaps not be contained in the Buddhist canon. The second work, Wu-liang-shen-king, is a Sûtra. Mr. Beal informs us that Wu-liang-shen is the name of Amitâbha taken in the acceptation of "Eternal." This Sûtra may correspond with the Amitâbha-vyâha of the Thibetans, placed in the Kon-Tsegs of the Bka'-gyur (*Asiatic Researches*, vol. xx. part ii.); but as Mr. Beal calls his translation "The Western Paradise" (p. 378), the original would seem rather to correspond with the Sukhavati-vyâha, and the opening passages seem to have reference to the details given by Csoma concerning the Thibetan work, which is the third in the 7th volume of the section (*Asiatic Researches*, vol. xx. part ii.). It is moreover possible that the Amitâbha and the Sukhavati-vyâha of the Bka'-gyur are one and the same book.

The history of Avalokiteçvara is curious. It is this divinity who comes to life again perpetually at Lhassa in the person of the Thibetan Pope, the Dalai-Lama. In China, he has become a female deity : Mr. Beal states this as a fact without giving any explanation. The name of Avalokiteçvara has also its history. The Thibetans render it by Sbyan-ras-gzigs-dyang-phying, "The Lord who looks with his eyes." The Chinese call it Kwan-shai-yin. Kwan also signifies to look, like avalokita ; but shai-yin, "world-voice," does not correspond with Içvara, the master, and some have thought that it was a corruption of Tsen-tsai, the self-existent (Içvara, p. 383). Mr. Beal refutes this opinion, and proves by various arguments, which appear to carry weight, that Kwan-shai-yin is correct, and is not the translation, as had been thought, of Avalokiteçvara, but of Samanta-mukha, another name or epithet of Avalokiteçvara, signifying "the universally manifested voice." I am not certain that Mr. Beal has fully solved the difficulties which the Chinese name of this divinity presents ; but assuredly his discussion is worthy of serious consideration. With regard to Samanta-mukha, which is the title of the 24th chapter of the "Lotus of the good Law," Mr. Beal gives the translation from the Chinese version, which offers materials for a fruitful comparison with the corresponding portion of the

* The ninth work in the section named Sher-phyin (Prajñâ-Pâramitâ) in the Bka'-gyur is reduced to the letter A, considered as the mother of all learning, because it represents writing and the beginning of all knowledge. (See *Asiatic Researches*, vol. xx. part ii.)

† Vairochana signifies "son of Virochana." Virochana, from vi ruchi, signifies nothing but "to shine :" the preposition vi bears

often the notion of dispersion. One might translate it, "of which the light spreads itself afar," beaming. Virochana is one of the names of fire, the sun, the moon, &c.

French translation by Burnouf. At the end of this extract, the learned Sinologue makes us acquainted with a much less well known writing, the liturgy of Kwan-yin, a very interesting summary of a popular Chinese form of worship.

V. The fifth section (Decline and Fall) is very short, and treats of the notions foreign to Buddhism, which have been added to it voluntarily or forcibly, particularly through the influence of the Indian forms of worship of Vishnu and of Çiva, especially of the latter. This question might be treated far more fully than it has been by Mr. Beal. He has attached himself especially to a very curious point in this decadence, the worship of serpents, to which Mr. James Fergusson has already called our attention. Mr. Beal takes this opportunity to give us an interesting extract, according to the Chinese version, of the Megha-mandala-varshavardhana, the Sûtra which is repeated to obtain rain, a blessing so often needed, especially in India. He also touches in a few words on a curious and interesting question, the influence which Christianity may have had upon Buddhism (p. 412). The introduction of Christianity into Central Asia by the Nestorian missions, the traces of which were long preserved, is certainly worthy of deep study. In his introductory remarks Mr. Beal had previously spoken of what the Christianity of the middle ages borrowed from Buddhism, and we know that Mr. Max Müller has already thrown light upon one of the points which prove the connection between two religions so similar in certain features, though fundamentally so dissimilar.

There exists in this connection, and in these mutual borrowings, a fruitful source of observations, and of historical information, which will be explored at some future period when our acquaintance with Buddhism is more extended.

Mr. Beal's book is neither entirely new, as regards its component parts (seeing that he has already published some of them), nor is it fully satisfactory with regard to Chinese Buddhist literature, of which he gives us but a very partial sketch; but, considering the abundance of details and the information of all kinds which it contains; the picture of Chinese Buddhism which it presents to us, taken from the very source; the proof it furnishes of the importance of this fraction of Buddhism, and of the vast literature which is the exponent of its doctrines, institutions, and history, the book before us is of great value. It will contribute to the popular knowledge of Buddhism, and at the same time it will give valuable assistance to scholars in their work of comparing the different branches of that religion, which, having its birthplace in India, has spread itself over the whole of Oriental and Central Asia.

LEON FEER.

Contents of the Journals and Notes.

British Quarterly, January.—The theological article of this number is a curious specimen of the use and abuse of Rabbinic lore. It professes to be a criticism on *The Speaker's Commentary*, but the only considerable defect which it discovers in the first volume of that work is the neglect of Jewish tradition. Bishop Browne, for instance, and Mr. Espin, have failed to account for an inverted Hebrew letter (*Nun*); the Bishop has also committed himself to a hasty statement about "the belief of all Jewish antiquity"; while Mr. Clark has shown himself to be ignorant of the difference of opinion among the Jews of Palestine and Babylon on the subject of the Decalogue. The reviewer altogether ignores "modern" criticism, and thinks that the occurrence of the name Jehovah in the Moabite inscription is a convincing attestation of the history of Balaam.

Theolog. Literaturblatt (organ of the Rom. Cath. faculty at Bonn).—Dr. Ruland gives a description (Dec. 18) of an important work just published, as the result of fifteen years' toil, by Prof. E. Ranke, the fragments of an ancient Latin version of the O. T. preserved in two palimpsests at Würzburg.—Prof. Langen reviews some recent books on the Apocalypse, and (Jan. 1) the works of Weiss on St. Mark, and Godet on St. Luke.—Herr von Reumont describes (Jan. 15) researches

on the basilica of St. Andrew at Rome in two recent numbers of de Rossi's *Bulletino*, and Dr. Hartsen reviews Maudsley's *Body and Mind*.

Zeitsch. für wiss. Theologie, Vol. xv. No. 2.—Pfeleiderer continues his exegetical studies of Pauline doctrines by an essay on Justification.—Hilgenfeld writes on the Christ-party and the Nicolaitans; the former, he thinks, stood in much the same connection with the first apostles as the latter with St. Paul.—Hitzig sums up the principal arguments against Lagarde's ingenious emendation of Isa. x. 4 in the *Academy*, Dec. 15, 1870.—Prætorius translates the book of Baruch from the Äthiopic.—Hilgenfeld continues his examination of Keim's *History of Jesus*.—Moriz Schmidt proposes an emendation of Theophilus ad Antolycum, ii. 6, p. 62 (Otto).—Siegfried reviews Cheyne's *The Book of Isaiah Chronologically Arranged, and Notes and Criticisms on the Hebrew Text of Isaiah*. He remarks of the former that, though the influence of Ewald is generally visible, the author has often struck out an original line of argument, and in some points of importance, which the reviewer might easily have added to, has rejected the authority of his master. The exegetical notes, a department wholly neglected by Ewald, are said to evidence wide reading and a sound critical judgment, and in general the style of the work is commended for its clearness and precision. *Notes and Criticisms* is also described as sound in method, skilful in combination, and here and there extremely acute. As to Isa. viii. 19-23, the reviewer suggests (very plausibly, in our opinion) that verses 21 and 22 should be transposed.—A. H. reviews Part I. of Ewald's work on the New Testament, and Haupt on Old Testament quotations in the Gospels; Rönsch, Lagarde's edition of Jerome's *Quaestiones* and *Onomastica Sacra*; A. H., Lucht on the two last chapters of the Epistle to the Romans.

Theologisch Tijdschrift, January.—Prof. S. Hoekstra gives us his thoughts on the nature and method of Theology.—Prof. Kuennen discusses an acute but over-subtle conjecture of Dr. Oort on the Beth-Ephrath of Mic. v. 1.—Among the books reviewed are *The Speaker's Commentary*, and the attempted refutations of that work by Colenso and Strange. It is intelligible that Dr. Kuennen should exaggerate the public importance of the Archbishop of York's undertaking, and equally so that he should administer a gentle reproof to such biased investigations.

Canon Perowne, the commentator of the Psalms, has favoured us with a letter on the subject of Prof. de Lagarde's "Discovery of Psalmists." He points out that it would be a surprising coincidence if, when we have but two acrostic Psalms with a supernumerary verse, the author's name should in each case be formed from the same verb *pādāh*, compounded with one of the sacred names, and "waits for further light."

Dr. Quarry, author of an able apologetic work on "Genesis," referred to as an authority by Bishop Browne, has written to complain (1) of Bishop Colenso's reproof of the Bishop of Ely for his unquestioning acceptance of the results of Dr. Quarry's analysis, and (2) of his misrepresentation of Dr. Quarry's view of the argument from the repetition of the sacred names.

Mr. Finn has published a collection of papers on *The Orphan Colony of Jews in China* (Nisbet), together with a translation of the original letter received by Mr. Layton, British Consul at Amoy, in 1850, from the Jews in Kae-Fung-Foo. It would appear that this Jewish colony dates from the close of the eleventh century of our era, and was formed by an emigration from India. The Jews of the latter country [came originally from Persia; and, in fact, the colophon of the Chinese copy of the Pentateuch is in Persian (p. 65)]. It is strange that no mention is made of the Day of Atonement in the Chinese letter to Mr. Layton (p. 49). In the appendix Mr. Finn gives the Hebrew letter addressed to the Chinese community, to which the letter above referred to was the reply. If these Chinese Jews had understood Hebrew, they would probably have suspected the true character of their questioners.

New Publications.

- CREMER, H. Biblisch-theologisches Wörterbuch d. neutestam. Gräcität. Zweite sehr verm. u. verb. Aufl. Gotha: Perthes.
- GRAU, R. F. Entwicklungsgeschichte d. neutestam. Schrifthums. Bd. II. Gütersloh: Bertelsmann.
- HAUSRATH, A. Neustestam. Zeitgeschichte. Thl. 2. Heidelberg: Bassermann.
- HEINZE, M. Die Lehre vom Logos in der griech. Philosophie. Oldenburg: Schmidt.
- JESCHURUN. Zeitschrift für d. Wissenschaft d. Judenthums. Deutsche Abth. Breslau: Schletter.
- PAR PALIMPSESTORUM WIRCEBURGENSIUM. Antiquiss. V. T. version. Lat. fragmenta e codd. rescr. eruit etc. Ern. Ranke. (Price 2/-) Vienna: Braumüller.
- REINKE, L. Beiträge zur Erklärung des A. T., enthaltend elf Abhandlungen. Bd. 8. Giessen: Roth.
- SCHOLTEN, J. H. De Apostel Johannes in Klein-Azië. Rotterdam & Van Baalen.

Philosophy and Physical Science.

Trilobites. Extrait du Supplément au Volume I^e du Système silurien du Centre de la Bohème. Par Joachim Barrande. Prague et Paris, 1871.

THIS work comprises the author's review of his studies on the development of Trilobites in general; a chapter on the vertical distribution of Trilobites in the Silurian formation of Bohemia; a comparison of the occurrence of the Trilobites and Cephalopods in the Silurian basin of Bohemia; while a fourth chapter expounds some new palæontological views founded on his observations. His conclusions, which are strongly anti-Darwinian, demand attention on account of the author's vast experience in palæontological questions.

Notwithstanding the considerable time and attention which the author has bestowed upon this subject, he has failed to discover any evidence of the gradual development of Trilobites. Neither the modifications of the head of the different genera nor of the thorax or pygidium offer sufficient characters, and in cases where there exist intermediate forms, the great difference in the geological age to which they belong must at once cause us to dismiss all thoughts of placing them side by side. Besides this, a portion at least of the Trilobites of the Primordial fauna do not belong to the lowest organized forms of this Crustacean group, whilst the dimensions of some of the Paradoxides are only surpassed in size by very few forms of the second fauna, which belong to the genus Asaphus. The first appearance of nearly all genera in the first and second fauna also is not in accordance with the hypothesis, that the generic characters are developed like the specific variations by gradual changes. The non-appearance of new genera is very surprising, at a time when the order was still in full development, in the middle of the Palæozoic epoch.

According to the theory of transformation, the animal in developing itself ought to reproduce the forms of its ancestors. But Trilobites show already in some of the oldest known forms a great number of segments, whilst it is known that the embryonic forms of Trilobites possess only few segments. M. Barrande does not believe in a retrograde movement in the development of the Trilobites after the Primordial fauna, considering the great irregularity (which he shows by means of numerous tables) in the vertical distribution of this class. He devotes a chapter to the relations which are proved, by the distribution of the genera and species of Trilobites in Bohemia, to exist between the Silurian formation of that country and other parts of Europe.

He shows there is not one known genus of Trilobites in any of the Silurian strata of Europe which is not also found in Bohemia. Six genera, amongst them Hydrocephalus and Sao, are only known from Bohemia. The North Silurian zone possesses a certain anteriority as compared with that of Bohemia, as some of the Trilobite types occur lower down in Scandinavia.

Comparing the Cephalopodous fauna with the Trilobite fauna of the Silurian basin of Bohemia, Barrande finds that, besides the earlier appearance of Trilobites (the Cephalopoda are wanting in the Primordial fauna), they are also numerically by far the stronger order. Only in the third fauna do the Cephalopoda become more important and numerous in comparison with Trilobites. These two great groups show great contrasts, but it may be doubted whether the appearance of one, and the diminution of the other group, as they are entirely independent of each other, are due to changes of the physical conditions during the Silurian epoch.

The author tries to explain the appearance of species in a stratum by four hypotheses : 1. The vertical propagation of species, which range from the oldest strata to younger

horizons. 2. The filiation, which points to the development of new species out of older ones. 3. The immigration from other parts. And lastly, 4. *Renovation*. By renovation he understands the appearance of species which cannot be explained by any of the three former modes of appearances. This *generatio aequivoqua* of Barrande is however entirely different from intermittence of species, which he treats in a separate chapter.

Barrande finally comes to the conclusion that most of the successive series of Trilobites met with in the Bohemian Silurian formation can only be explained on the theory of *renovation*. A very small number of species are regarded as having immigrated, but the numbers in the column of "propagation verticale" are considerable. But he holds that there is not one Bohemian trilobite, nor one cephalopod, which is derived by filiation (*i. e.* by descent with modification), arguing again from palæontological data, that far more forms of great geological longevity existed amongst the Trilobites than amongst the Cephalopoda. The fact that the percentage of immigrated Trilobites in Bohemia is twice as large as that of Cephalopoda, although the latter possessed far better organs of locomotion, he explains by supposing the action of strong currents in the seas of the Silurian epoch. The proportion of the genera of Cephalopoda to that of Trilobites in the Bohemian Silurian rocks is as 1 to 2.

The last chapter of the book is taken up by "palæontological theories examined in the light of facts." After an introduction, treating of the insufficiency of our knowledge of the "pre-primordial" epoch (in which he considers the Huronian system as the probable equivalent of the Upper Laurentian group), he speaks of the absence of all Foraminifera and the rare occurrence of Protozoa in the whole of the Primordial fauna; farther the absence of Corals, Conchifera, and Cephalopoda, and the absence of Heteropoda in all but the last phase of the Primordial fauna. The Brachiopoda only are well developed, although not nearly so numerous as the Trilobites. All intermediate forms between the Eozoon of the Lower Laurentian and the highly organized forms of the second Silurian fauna are therefore entirely absent. The few fossils of the Cambrian system, which ought much to be reduced in its vertical extension, and which may represent the "étage B" of Barrande, do not offer any support to the theory of filiation. Amongst these fossils are represented Brachiopoda (Lingula), Pteropoda, Bryozoa, Annelides, Starfishes, Echinoderms, Corals, Sponges, and plants. The absence of Trilobites in the Cambrian system is an important piece of negative evidence in respect of the sudden and numerous appearance of these Crustacea in the Primordial fauna. It is this sudden appearance of the Trilobites, repeated by the Cephalopoda at the beginning of the second, and by the Fishes at the end of the third fauna, which places the author in opposition to the Darwinian theory.

C. L. GRIESBACH.

ENGLISH GOVERNMENT ECLIPSE EXPEDITION.

Jaffna, December 16, 1871.

THE results obtained by the several parties of the Eclipse Expedition are not yet known, and I am unable to give more than a provisional sketch of the conclusions that have been arrived at.

The members of the expedition were spread over India and Ceylon, in order to render them as independent of weather as possible. Messrs. Lockyer, Abbay, and Davis, were on the extreme left, Captain Tupman, Mr. Moseley, and I, on the extreme right in Ceylon. M. Janssen observed from Ootacamund.

The weather over the whole line of totality was excellent, and the telegrams received state that the observations made were very satisfactory.

Mt. Lockyer states that "five admirable photographs were obtained at Bekul." Also that "the polarization was atmospheric

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with Savart undoubtedly, slightly radial with biquartz—1474 region very small. Respighi and myself have both obtained monochromatic images of the corona." These results are not quite in accordance with those obtained in Ceylon, but it is to be hoped that, when the reports are all received and published, the discordance may be found to be less than seems to be the case at present.

At Jaffna, Captain Fyers observed the reversion of the whole dark line spectrum just at the moment of totality, and afterwards four bright lines, C, D, 1474, and F. Captain Tupman devoted most of the time to sketching the corona, finding its structure to be most wonderfully intricate and peculiar, having bright rays both curved and inclined to the radial direction; also very deep rifts. He found the corona was visible for about 3° after the end of totality, and during this period he proved the polarization to be radial, and to extend to a distance of 35' from the moon's limb. Mr. Moseley saw no reversal of the dark line spectrum, but obtained several bright lines, and found that the 1474 line could be traced up to a height of 23' from the moon's limb. He could find no lines on the dark moon. I myself obtained distinct proof of strong radial polarization, but did not observe at a distance of more than about 12' from the moon's limb. Five extremely good photographs were obtained at Jaffna by Captain Hogg, R.E.

The sketches at Jaffna agree very well with the photographs, only differing from one another in the amount of detail introduced. A considerable change, however, is observed in the sketches made at Kokelai and Trincomalee.

The corona was most wonderfully bright, and the light during totality was quite sufficient to enable a person to read. It appeared to me of a light purple tint, and remained visible for several seconds after the end of totality.

W. J. LEWIS.

POSTSCRIPT.—According to Mr. Lockyer's letter from Ootacamund (*Nature*, January 18, 1872) all the Indian observers, with the single exception of those at Manantoddy, had good weather. He describes the corona as a star-like decoration of the purest silvery whiteness, with its rays arrayed almost symmetrically, three above and three below, two dark spaces or rifts at the extremities of a horizontal diameter. The rays are composed of innumerable bright lines of varied length. From a steamer above the point where the sun had disappeared he obtained a vivid hydrogen spectrum, with line 1474 slightly extended beyond it, very faint throughout its length, and thickening downwards like F. The C line was very vivid, as was likewise the continuous spectrum, although there was no prominence on the slit; the spectrum was undoubtedly one of glowing gas. On using the simple train of prisms of Lockyer and Young, four exquisite rings became visible, with projections where the prominences were. C came first in brightness, then F, then G, and lastly 1474. On examining the corona with the 6-inch Greenwich refractor, it was found that the interlacing filamentous structure which is so marked could not be traced to distances less than from 5' to 6' from the sun; within this region no radial character is detected.

Prof. Respighi was stationed at Poodocottah (*Nature*, January 25, 1872). One of his objects was to search for Young's, or the bright line, stratum immediately before the beginning and at the end of totality. Thirty seconds before totality the dark lines had become more strongly marked than before, and within a few seconds of totality they disappeared entirely, the spectrum becoming continuous. Like Mr. Moseley, he failed to detect the reversal of the lines which Prof. Young observed in the 1870 eclipse. The professor thinks it not impossible that the bright atmospheric light diffused over the spectrum of the solar limb may have concealed them.

After the appearance of the chromosphere at the western edge there was suddenly projected on the spectrum of the sun's limb a stratum of bright lines separated by dark spaces. They were too transient to allow the observer to determine whether they were due to partial reversal or simple discontinuity. At the instant of totality the chromosphere of the edge last eclipsed was reproduced in the four lines C, D⁴, F, and G, with extraordinary intensity of light. The coloured zones of the corona then increased in prominence, one in the red corresponding with line C, another in the green was probably line 1474 of Kirchhoff's scale, and a third in the blue perhaps coincides with F.

By a mishap Mr. Lockyer was unable to look for the reversal of the lines.

THE AXIOMS OF GEOMETRY.

TO THE EDITOR OF THE ACADEMY.

SIR,—Will you permit me to say a few words on the strictures which Mr. Stanley Jevons put forth in *Nature* for October 19, concerning my paper on the Axioms of Geometry (*Acad.* vol. i. p. 128). If I rightly understand the sense of the statements in which Mr. Jevons contests my conclusions, the point of difference between us is the following:—

Where I say that geometrical axioms are true or not true for beings living in a space of a certain description, I mean that they are true or not true in relation to those points, or lines, or surfaces, which can be constructed in these spaces, and which can become objects of real perception to those beings. To give a popular idea of the meaning of my statement, I assume that reasonable beings could live in space of two dimensions, which might be either a plane, or the surface of a sphere, or the saddle-shaped pseudo-spherical surface of which I gave a description. Beings living on a plane would have the same geometrical axioms as we find in our planimetry. Beings dwelling on a spherical surface would fail to appreciate the truth of all theorems based on the axiom that two shortest lines cannot intersect in more than one point; they could entertain no notion of parallel lines, since all the shortest lines of the space known to them would intersect, when produced, not in one only but, in two points. Beings on a pseudo-spherical surface would know of parallel lines, or lines which do not intersect; but they would find that through a given point an infinite number of lines, parallel to a given line, could be drawn. They, therefore, would consider the theorem, that through a given point can be drawn but one line parallel to a given shortest line, as untrue. The sum of the angles of a triangle bounded by shortest lines would be equal to two right angles for the first class of beings, greater for the second, and less than two right angles for the third class.

Mr. Jevons does not dispute most of my assertions. I shall confine myself to a few comments on his mode of expressing his objections. He says that the theorems of Euclidean geometry would not only be found to be *inapplicable* to spherical or pseudo-spherical spaces, but they would appear positively *erroneous* as soon as any one should try to apply the theorems respecting *straight lines* to the *shortest* or *geometrical lines* of finite length existing in those spaces. And, again, the beings living there ought to say Euclid's geometry is *inapplicable* to reality, because what he calls *straight lines* do not exist, at least not to any finite length.

As regards these points, there appears to exist no essential difference between my opponent and myself. But Mr. Jevons vindicates truth in another sense for the Euclidean geometry. Even if it should turn out to be *inapplicable* to the relations of the real points known to our imaginary beings, he thinks that, if they possessed human power of intellect, they ought to find out by reasoning the system of Euclidean geometry. They would, indeed, as Mr. Jevons justly remarks, if they studied the geometry of infinitely small figures, apply to them the same theorems which Euclid has laid down for figures of every magnitude.

Now, in the first place, it is evident that it is not the same thing whether Euclid's theorems be true only under very limited conditions, or for all space without exception. The geometry of infinitely small figures would be of great importance in discovering a system of geometry identical in form with that of Euclid, but truths applicable to figures of infinitely small dimensions only could not be considered as necessary truths or axioms of geometry in general.

But as we, living (at least as far as we know) in space fulfilling the postulates of Euclidean geometry, can develop analytically the system of pseudo-spherical geometry of any number of dimensions, so beings living in a pseudo-spherical space could invent analytically the system of Euclidean geometry as relating to an imaginary space not accessible to their experience; and, perhaps, they would find that the calculation of the geometrical quantities of their own space would become more simple or more symmetrical by introducing the system of variables belonging to a space of more dimensions, as we, sometimes, introduce a fourth co-ordinate into the equations of lines and surfaces in order to get homogeneous expressions, which we even differentiate with respect to this superadded variable. Our mathematicians, moreover, speak of imaginary lines and points of intersection (of two ellipsoids for instance), and their imaginary co-ordinates, as if such imaginary dimensions of space really existed; and they do this to preserve analogy and homogeneity in the analytical expressions. But for all this no mathematician

ever came to the conclusion that a fourth dimension of space exists, even though he find it convenient to write his equations as if it existed. And I cannot see why the mathematical intellects of a spherical or pseudo-spherical world should come to another conclusion, even if they should discover the simplification of their analytical geometry which they could derive from the introduction of the co-ordinates of a Euclidean space of more dimensions. Points and lines in such a space would have no more meaning to them than length in the direction of the fourth co-ordinate can have for us, although we introduce such a co-ordinate into our calculations.

I think, therefore, that Mr. Jevons does not distinguish sufficiently between the truth which corresponds to reality, and analytical truth which is derived from a hypothetical basis by a logical process consistent in itself and leading to no contradiction. For us the Euclidean geometry is true in reality: a theorem of the spherical or pseudo-spherical geometry could be called true in the second sense, when consistent with the whole system of such a geometry. For the intellects of a pseudo-spherical world, on the contrary, the Euclidean geometry would be fictitious and that of Lobatschewsky real.

H. HELMHOLTZ.

PROFESSOR TRENDELENBURG.

AN unusually large number of English students will receive with regret the news (which has just reached us) of Trendelenburg's death. He had attained a twofold eminence (as a philologist and Aristotelian commentator, and as an original thinker) very remarkable in the vigorous subdivision of intellectual labour which prevails in Germany at present. His metaphysical system has found many more critics than disciples: but the second of the two great impulses towards the apprehensive study of Greek thought which Germany has revived in the present century may be fairly attributed to him. Trendelenburg led, if he did not exactly create, the reaction from Hegel's Hegelianisation of the fathers of philosophy. In fact, his passionate advocacy of the real Aristotle as against Hegel's Aristotle gives the key to Trendelenburg's own metaphysic. Trendelenburg as much as Hegel refused to admit the gulf fixed by Kant between the laws of thought and the laws of being: but he equally declined to accept Hegel's novel dialectic as a substitute for both. The correspondence between the two which the Greek philosophy assumes must, he held, be accepted: but it must also be explained by the explicit enunciation of a connecting link between the mental and material worlds: such a link Trendelenburg found in motion (*Bewegung*). Many students of Aristotle who have not followed him in his metaphysical theory have joined in this reaction from Kantian formalism to the older view of logic—as Ueberweg. It is curious that Trendelenburg did not carry into his study of Kant the same perfect precision of knowledge which marks his Aristotelian commentaries: so that in his recent controversy with Kuno Fischer on Kant's conception of space the victory lies undeniably with the younger antagonist.*

H. SIDGWICK.

Scientific Notes.

Physiology.

The Influence of the Vaso-motor Nervous System.—The first number of *Pflüger's Archiv für die gesammte Physiologie* for 1872 contains a long article by Heidenhain on this subject, maintaining his own conclusions in opposition to those recently advanced by Riegel in the same periodical. To give a brief summary of the results of the first series of Heidenhain's observations, we find, firstly, that excitation of sensory nerves, or of the medulla oblongata, causes a fall in the temperature of the interior of the body. This effect is occasioned by certain alterations taking place in the circulation, such as extensive contraction of the small arteries causing increased opposition to the passage of the blood. But very soon the propelling force of the heart overcomes this resistance, and an acceleration of the blood-current is induced—rendered evident in the large vessels of the extremities and head—causing an increased flow of blood to take place within a given time through the cold peripheral parts of the body. A consequence of this is that a more rapid (in part at least) equalisation of temperature occurs between the latter regions and the warmer internal parts. Thus, while the temperature of the periphery of the body rises, and, consequently, the loss of heat by radiation, conduction, &c., is aug-

mented, the temperature within the body must fall. These, in few words, are Heidenhain's views, almost every point of which has been contested by Riegel. Heidenhain, since reading Riegel's essay, has corroborated the fundamental fact, that irritation, whether direct or reflectorial, of the vaso-motor centres occasions depression of the temperature of the interior of the body, by experiments on fifteen dogs. The electrical stimulus applied, he remarks, must be of sufficient strength; and here, perhaps, lies the discrepancy between Riegel's observations and his own. Another source of possible error on Riegel's part may arise from the region chosen for the estimation of temperature, for though there can be no difficulty in introducing the thermometer into the carotid and left ventricle, the inferior vena cava is much more likely to be missed, while insertion in a lateral channel (as one of the renal or hepatic veins) would vitiate the experiment. Riegel, moreover, used the rectum as a place for estimating the variations of temperature, and this Heidenhain, for various reasons, takes exception to. He prefers the aorta. Then the period of digestion, the degree to which the animal was subjected to the influence of woarara, or was allowed to struggle during the necessary preparations, likewise influence the result. Heidenhain brings forward a considerable amount of additional corroborative evidence, showing that depression of temperature in the interior of the body stands in direct relation to the accompanying changes occurring in the circulation; that excitation of sensory nerves, or of the medulla oblongata, increases the rapidity of the blood-current; and that excitation of the vaso-motor centres, whether direct or reflectorial, really augments the flow of blood through the peripheral parts of the body. Very elaborate tables are appended to the paper.

Contractility of Muscle Plasma.—M. Lavdowsky, in an original communication to the *Centralblatt* (No. 49, 1871), gives the results of his researches on the protoplasm of the smooth muscle cells of the muscular tissue, and chiefly of the intestinal canal of the leech and some other annelids, which he states can easily be observed to possess contractile properties. He finds two forms of muscular elements in these animals: one forming fusiform cylinders, destitute of a membrane, and anastomosing with each other, chiefly found in the walls of the intestinal canal; the other characterized by the presence of a highly retractile and very firm layer, forming the peripheral part of the muscular elements, and found principally in the skin. Both forms of muscular elements are supplied with nerves. On the application of external mechanical irritation or of induction currents the wave-like contraction of involuntary muscular fibre is not observed, but in its place a primary elongation and attenuation of the muscle cylinders may be observed, followed, after a short period of repose, by contraction and thickening. The number of contractions in the fresh fibres, when isolated, varies from 5 to 8 in the minute, but in the living animal from 10 to 20, or even from 36 to 40.

Peripheral Distribution of Non-medullated Nerve Fibres.—Dr. Klein contributes a good paper on the distribution of the non-medullated nerves in the *membrana nictans*, to the January number of the *Quarterly Journal of Microscopical Science*, now edited by Drs. Payne and R. Lankester. He points out the complex structure of this membrane, and the difficulty of preparing successful specimens with chloride of gold, in consequence of almost all the elements of this tissue combining with the gold as readily as the nerves themselves. He places the perfectly fresh membrane in a one-half per cent. solution of chloride of gold for an hour, next cautiously transfers it to pure water and a bright light during several days, and then brushes off the epithelium, and mounts the specimen in glycerine. He describes four orders of nerves: the finest, which he traces to the internal surface of the capillaries and to the cells of the epithelial investment, are extraordinarily fine and delicately varicose, and can scarcely be made out with any other aid than a Hartnack's No. 8, 9, or 10 immersion lens. He is unable to confirm Pflüger's views of the connection of their fine filaments with the cellular elements of glands. He describes in full pigment cells, and the changes they undergo under various conditions, and gives, lastly, an account of the nerves of the peritoneum.

Duration of the Electric Discharge of the Torpedo.—M. Marey (*Comptes rendus*, lxxiii. p. 958) has applied some of his ingenious mechanical apparatus to the determination of this question, and has ascertained that it amounts to 1-14th of a second. As this is also the duration of a muscular contraction, M. Marey considers it to be a fresh argument in support of the essential agreement in the properties of the electrical organ and those of the muscles.

A paper appears in the *Journal of Anatomy and Physiology*, by Frank Champneys, B.A. of Brasenose College, "On the Muscles and Nerves of a Chimpanzee (*Troglodytes niger*) and a *Cynocephalus Anubis*." The whole of the muscular system has been worked through by Mr. Champneys in both animals with great care; but the description of the nerves is very imperfect, and is, in fact, almost limited to the branches of the cervical, branchial, and lumbar plexuses distributed to muscles. Looking at the account of the muscular system broadly, the first noticeable point is that the main masses of muscle exhibit nearly the same features in both animals, but especially in the chimpanzee, which

* See *Academy*, vol. ii. pp. 67-69.

characterize them in man. Thus we find that the pectorales (major and minor), the trapezius, hyoid muscles, scaleni, deltoid, rhomboidei, serratus magnus, latissimus dorsi, and the principal muscles of the arm and leg, have almost identical attachments with the corresponding ones of man, or at least with only such trifling variations as might be found in different human subjects. Some interesting peculiarities, however, here and there occur. Thus both the extensor ossis metacarpi pollicis, and its homologue in the leg, the tibialis anticus, consisted in the chimpanzee of two separate bellies, having the same two insertions as the single muscle in man. In Anubis, however, the former muscle is not double. There is no extensor primi internodii pollicis in either animal. Both possess an extensor indicis, which, moreover, in Anubis, give a tendon to the middle finger. Mr. Champneys cites other authorities in disproof of the old dictum that no ape can point. The attachments of the ten interossei of the chimpanzee are carefully noted. The paper is enriched with numerous notes, which show that Mr. Champneys has very carefully studied the work of his predecessors.

Geology.

The Metamorphic Rocks of the Western Alps.—Alpine geologists were formerly wont to term a number of the strata underlying the undoubted Triassic or Jurassic rocks of the Alps metamorphic rocks. It has been reserved for the present young and active generation of Alpine workers to demonstrate the fallacy of this view at all those localities where metamorphic action was said to be recognised. B. Gastaldi (in *Studi geologici sulle Alpi Occidentali, con Appendice mineralogica di G. Strüver, estratto dalle Memorie del R. Comitato Geologico d'Italia*, vol. i. 1871, Firenze) shows that in the Western Alps the Mesozoic and Palaeozoic formations rest in an unaltered condition on crystalline rocks. Among the latter he distinguishes—1. The old gneiss or central gneiss. 2. The younger crystalline shales or “pietre verdi.” The latter comprise, in addition to chloritic and serpentine rocks and calcareous mica-slate, the entire mass of the younger gneisses and mica-slate, the latter often alternating with hornblende rocks. They likewise include compact granite and syenite. Gastaldi hints at analogies existing between the “pietre verdi” and the Laurentian and Huronian gneiss-systems.

Notes on the Ak-tau and Kara-tau Mountains on the Eastern Shores of the Caspian.—The occurrence of Liassic coal on the Caspian shore is a further illustration of the wealth of fossil fuel which the Lias of Eastern Europe and Western Asia possesses. In addition to Lias, strata of Neocomian, of Gault, and of the Sénonian, very rich in fossil remains, are, according to G. v. Helmersen (*Bull. de l'Académie impériale des Sciences de St.-Pétersbourg*, tome viii. 283) met with in this district.

Marine Shells of the Desert of Kara-Kum.—In the sand of the desert of Kara-Kum, north of Syr-Darja in Turkestan, are found well-preserved specimens of *Cardium edule* and *Dreissena polymorpha*. Both species still live in the Lake of Aral, and in the Caspian, Black, and Mediterranean seas; so the above occurrence indicates former eastern extension of the Aral lake. It is probable that the entire region enclosing the Aral lake, the Tschä river, and the deserts of Majun-Kum and Akkum, was covered by salt water up to the commencement of the present geological epoch (*Ibid.* tome vii. 756.)

Loess in South Africa.—Amongst the specimens collected by A. Hübner in South Africa were some freshwater fossils from a loess deposit near the Gokwe, a tributary of the Limpopo river. Dr. Oscar Böttger identifies them with *Pupa tetraodus* and *Cionella Gokweana*. Strange to say, these forms are in no way related to the recent South African forms, but are closely allied to living European freshwater shells. (*Ber. des Offenbacher Vereins für Naturkunde*, 1871, xi. 6.)

Fossil Fish from the Lower Carboniferous Limestone of Burdie-house.—In the *Geological Magazine* for December, 1871, Prof. Traquair describes a new species of fossil fish, *Phaneropteron elegans*, from the Lower Carboniferous limestone of Burdie-house. The author observes some new points in the structure of the type species of this genus (*P. Andersoni*) from the Devonian yellow sandstone of Dura Den, the most important being that the dorsal fin in this fish is prolonged as a dorso-caudal to the extremity of the body, as is the case with *Lepidostiren* and *Ceratodus Forsteri*.

Coal in the Trap of Glenarbuck.—Thin seams of very poor coal are known to occur in beds of Trappean ash at Glenarbuck, near Bowling. Mr. Young, vice-president of the Geological Society of Glasgow, has recently described in the Journal of that society the discovery of thin beds of indurated shale, yielding remains of fish of Carboniferous genera, associated with and overlying one of the seams of coal in this glen. In the same neighbourhood another thin seam of coal crops out at a high level in beds of Trappean ash. The woody structure of the plants constituting the coal is still clearly distinguishable, the seam in one place yielding parts of the stem of a species of *Sigillaria*.

Fossil Man.—Director von Hautken communicates to the Geological Society of Hungary (*Földtani Közlöny*, 1871, vii. 92) the dis-

covey in the loess deposits of Nagy Sáp, in the comitat of Gran in Hungary, of the remains of Man associated with post-tertiary remains of Mammalia. In the neighbourhood of Brüx in Bohemia an almost entire human skeleton, together with a stone hammer, have been found. The cranium closely resembles in its characteristics the well-known skull fragment from the Neanderthal. The skeleton was lying with the head raised in a sand bed of diluvial time, at a depth of two feet from the surface and overlying a bed of tertiary coal. A paper on this find by F. von Hauer occurs in the *Mitt. der anthropologischen Gesellschaft zu Wien*, December 12, 1871.

The Peat of Austria.—The German provinces of Austria, with Bohemia, possess peat bogs covering an area of not less than 50,000 square miles and containing about 160 million cubic fathoms of peat. In Hungary the more important moors have an area of more than 900 square miles. The Austrian peat beds have an average thickness of thirty-seven feet. (*Zeitschrift des österreichischen Ingenieur- und Architekten-Vereines*, 1871, xxii. part 14.)

The Western Shores of Lake Ladoga.—The investigation of the district surrounding this lake, undertaken some time ago by Inostranzef, has shown the western part of its shores to consist of rocks representing the lower group of the Laurentian system. They are chiefly grey gneiss, in which can be distinguished an older variety with white and younger one with greenish oligoclase. Granite, with varieties of oligoclase, is found enclosed in it. Orthoclase gneiss and orthoclase granite are also met with. (*Notes on the Ak-tau and Kara-tau Mountains*, St. Petersburg, 1869.)

Chemistry.

The Greenland Meteoric Irons.—These remarkable masses, to which attention has already been directed in the *Academy* of 1st December, 1871, form the subject of a paper by Prof. Nordenskjöld (*Övers. af Vet. Aks. Värhandl. 1871, 873*). The occurrence of meteoric iron in Greenland is no novelty. In 1847 Rink obtained a mass weighing 21 lbs. at Niakornak. Another lump, weighing 26 lbs., and found by Rudolph, formed part of the ballast of a Greenland brig lying in Fortune Bay, not far from Godhavn. When the Swedish Expedition visited the island of Disco, the people of Godhavn were directed to search for “heavy, rounded, rusty-brown stones,” and these huge blocks were eventually discovered at Ovifak, west of Fortune Bay, and between Laxe Bay and Disco Fiord. The interesting fact of their being intimately associated with and in some instances actually embedded in basalt at Ovifak (blue mountain) has already been noticed. The chemical examination of three specimens of this find is as follows:

1. From one of the largest blocks, analysed by Nordenskjöld; 2. From a small and likewise detached mass, analysed by Nordström;

and 3. Iron found in the basalt, analysed by Lindström.

	1.	2.	3.
Iron	84.49	86.34	93.24
Nickel	2.48	1.64	1.24
Cobalt	0.07	0.35	0.56
Copper	0.27	0.19	0.19
Alumina	Trace	0.24	—
Lime	—	0.48	—
Magnesia	0.04	0.29	Trace
Potash	Trace	0.07	0.08
Soda	—	0.14	0.12
Phosphorus	0.20	0.07	0.03
Sulphur	1.52	0.22	1.21
Chlorine	0.72	1.16	0.16
Silica (soluble)	Trace	0.66	0.59
Silica (insoluble)	0.05	4.37	—
Carbon, organic compounds, &c.	10.16	3.71	(C 2.30 H 0.07)
	100.60	99.93	99.79

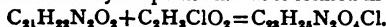
All three masses are nickeliferous; an unusually large though variable amount of carbon is present in each of them. They all contain chlorine, and exhibit the usual markings when etched, the iron of the basalt more especially. An exact analysis of the basalt itself cannot fail to throw light on this curious occurrence. The organic substance left in one instance, after the solution of the iron in copper chloride, amounted to 4.79 per cent., and had the following percentage composition:—

Carbon	63.64
Hydrogen	3.55
Oxygen (calculated)	32.81
	100.00

Bornite.—In continuation of his *Recherches sur les Minéraux belges*, de Koninck, of Liège, has published a paper on the bornite of Vieil-Salm (*Bull. de l'Acad. des Sciences de la Belgique*, 1871, No. 11, 290). It

occurs in quartz, associated with chlorite and a pale blue mineral which occasionally encrusts it, and appears to be a product of the oxidation of the bornite itself; it resembles in its chemical characters brochantite or langite. The bornite has a specific gravity of 4.97 to 5.04, with a hardness somewhat greater than that of calcite. The analytical numbers agreed best with those of the bornites of Woitski, White Sea, and Bristol, Connecticut, differing but slightly from those required by the formula FeCu_3S_4 . In its analysis a new method was employed which proved superior to those in general use. The finely powdered mineral was treated in the cold with a mixture of nitric acid (sp. gr. = 1.40) and bromine; the action is rapid, and the solution of the mineral in a few moments complete.

A New Base derived from Strychnia.—When brought together, strychnia and monochloroacetic acid combine, producing the chloride of a new base. Römer, who has described this reaction in the *Zeitschrift für Chemie*, 1871, part 14, heats three parts of the alkaloid and one of the acid for five hours at 180° , dissolves the product in water, separates any unchanged strychnia with ammonia, and finds the new substance deposit from the filtrate by evaporation. It is formed in this manner :



Its nitrate and oxalate are sparingly soluble in water; the chloride is readily dissolved by water and alcohol, but not by ether. Chromate of potash throws down from solutions of the base a yellow crystalline precipitate, and nitrate of silver deposits long colourless needles. In many respects the new body resembles glycocoll. It differs from brucia by 2H . The author expresses his intention to endeavour by means of nascent hydrogen to transform it into this alkaloid or an isomer.

Silicoproprionic Acid.—A very interesting paper by Friedel and Ladenburg on this acid and its corresponding ether is to be found in the *Annalen der Chemie*, clix. 259. Silicium chloride in contact with absolute alcohol forms the chloride of triethylsilicic acid, $\text{SiCl}(\text{OC}_2\text{H}_5)_3$, which, when submitted to the joint action of zinc-ethyl and sodium, is partially converted into ethyl orthosilicopropionate, $\text{SiC}_2\text{H}_5(\text{OC}_2\text{H}_5)_2$. This ether, if decomposed by very concentrated solution of potash, neutralised with acid, and rendered alkaline with ammonia, yields a white flocculent precipitate having all the appearance of silica. This body, silicoproprionic acid, $\text{SiC}_2\text{H}_5\text{O}_2\text{H}$, is insoluble in water, soluble in warm potash, and, like silica, separates from such a solution imperfectly by the addition of hydrochloric acid, and completely on evaporation. It differs from silica in being insoluble in soda solution even when this liquid is boiled, and in taking fire when heated. The authors ask whether the silica found in the ashes of plants exists as such in the living plant, or perhaps partially as silicon- and carboniferous compounds. It has been noticed by Sachs that plants which usually contain a considerable proportion of silica continue to thrive when deprived of it.

Artificial Alizarine.—It has been shown by Liebermann that the majority of artificially prepared specimens of alizarine are impure, and usually contaminated with monoxyanthrachinon. A new method of separating pure alizarine from the products accompanying its synthesis, and often incorrectly bearing its name, has been proposed by G. Auerbach (*Ber. Deut. Chem. Gesell. zu Berlin*, 1872, No. 18, 979). The crude alizarine is dissolved in sodium hydrate, and so removed from anthracinon, anthracene, &c. Carbonic acid is passed through the red solution, which throws down a reddish precipitate, consisting of sodium carbonate, alizarine, and sodium alizarate, while at the same time the walls of the vessel are covered with a yellow crust of alizarine. The precipitate, after frequent washing, furnishes, by decomposition with hydrochloric or sulphuric acid, alizarine in beautiful orange flocks that entirely dissolve in sodium hydrate to form a blue solution.

An Unwritten Chapter on the Metallurgy of Iron.—This is the title of a very interesting paper, by R. Mallet, in *The Engineer*, 15th December, 1871. His object is to show by one or two striking examples how extremely imperfect is our knowledge of ancient Oriental metallurgy. In past centuries the working of iron was carried on in India "upon a scale so stupendous as to rival the production of our largest steam-hammer forges in the Europe of to-day." By the principal gate of the ancient mosque of the Kutub, near Delhi, stands a wrought-iron pillar as large as the screw-shaft of one of our first-class steamships. Some notices of it have already appeared in the *Journal of the Asiatic Society of Bengal*. The shaft of this column is slightly spindle-shaped, and is surmounted by a capital of elaborate Indian design, carved by the chisel in the solid iron. The total height of the pillar above ground is twenty-two feet, that of the capital being three feet and a half. Its depth below the soil is greater than the height : excavations have been driven to a depth of twenty-six feet below the surface without reaching its foundation or the pillar being loosened, so that it is believed by Mr. Mallet that its entire length is not less than sixty feet. The diameter near the surface is 16.4 inches, that of the highest part 12.05 inches ; it contains about eighty cubic feet of metal, and weighs upwards of seventeen tons. At its middle height is an inscription of six lines in Sanskrit, the character being that form of Nagari which has been assigned to the third or fourth century of the Christian era.

The Synthetical Production of Organic Bodies.—In the *American Chemist*, 1871, Nos. 4 and 5, has appeared a very instructive compilation by J. Eneu Loughlin, of the now very numerous cases of the synthesis of organic compounds. The list is very useful for reference, and for the most part complete. Under the heading *Guanidine* we find no mention of Erlenmeyer's elegant method.

New Publications.

- ARENDT, C. *Leitfaden für den ersten wissenschaftlichen Unterricht in der Naturgeschichte*. 3. Auflage. Regensburg : Manz.
- DESCHANEL, A. P. *Elementary Treatise on Natural Philosophy*. Part III.
- HAGEN, C. *Ueber das Gesetz, wonach die Geschwindigkeit d. strömenden Wassers in der Entfernung vom Boden sich vergrössert*. Berlin : Dümmler.
- LAUER, J. *Spreng- und Zündversuche mit Dynamit und comprimirter Schiessbaumwolle*. Wien : Seidel und Sohn.
- NEUBAUER, C., und VOGEL, J. *Anleitung zur qualitativen und quantitativen Analyse des Harns*. Sechste Auflage. Wiesbaden : Kreidel.
- PFEIFFER, L. *Synonymia Botanica Locupletissima Generum, Sectionum vel Subgenerum ad finem anni 1858 promulgatorum*. Cassel : Fischer.
- RAMMELBERG, C., und WEDDING. *Die Metallurgie des Bleies*. Braunschweig : Vieweg und Sohn.
- REPORT of the Geological Explorations of the Fortieth Parallel. Vol. III. Mining Industry, by J. D. Hague. Washington : Government Printing Office.
- ROTH, J. *Die Lehre vom Metamorphismus und die Entstehung der krystallinischen Schiefer*. Aus den Abh. der K. Akad. der Wiss. zu Berlin, 1871.
- SCHORLEMMER, C. *Lehrbuch der Kohlenstoffverbindungen oder der organischen Chemie*. 2. Hälfte. Braunschweig : Vieweg und Sohn.
- WATTS, H. *Dictionary of Chemistry*. Vol. VI. (Supplement.) Longmans.

Philology.

The Indo-Germanic Vowel System. [Zur Geschichte des Indogermanischen Vocalismus. Von Johannes Schmidt. Erste Abtheilung.] Weimar : Böhla.

THE author of this work has given proof in his previous publications of solid attainments, an acute but judicious and circumspect treatment of philological subjects, and especially of a very respectable capacity for searching and methodical argument. All these merits are conspicuous in this his latest production, and the last of them in particular in a considerably higher degree. Looking therefore at its form alone, there is much to admire in the work before us, and we can sincerely recommend it to the attention of scholars. At the same time its contents are so valuable that from this point of view also it deserves a hearty recognition. We must not indeed conceal the fact, partly due perhaps to the incomplete state of the work, that we differ on many points from the author, and still hesitate to accept some of his results, but we are bound to add that others are proved to our entire satisfaction, and seem likely to influence the course of philological enquiry.

The fundamental idea of these researches is the same which is recognised theoretically by all philologists of the school of Bopp, though it is not always carried out in practice, that Indo-Germanic speech was already a complete language when the first of its known branches parted from it, and that therefore the branches which thus parted from it received and carried with them, not radical and derivative elements distinct from one another, but these in combination as complete words, or, to put it somewhat more plainly, complete words in which radical and derivative elements were closely united. Accordingly the enquiry as to the manner in which these words became different in the sepa-

rated languages ought not to be directed to those constituent elements by themselves, but to those combinations of sounds as wholes in which the elements appear united as words. "Our task," says the author (p. 9), "is to enquire what mode of forming the present [in reference to the verb *λαπ*, Latin *laic*, Gothic *laib*, Lithuanian *laik*] existed before the separation of languages, and what relation to this is borne by those which appear in the historic periods of the life of language. The same task is imposed on us by every word which appears with such correspondence in the various languages of our own linguistic family that we cannot help regarding it as a legacy from the primitive tongue," &c. At the conclusion of the same page we read: "It is the object of the following pages to contribute to the investigation of the history of language in this sense; they aim at bringing to light, as far as possible, the influential causes of all change of vowels (we will give this name to the transitions of a root from one series of vowels to another), at fixing the epoch of each in the history of our linguistic family, whether the change occurs in the roots when still independent, or when confined by suffixes."

In the prosecution of this object the author treats, first (pp. 11–28), of "The relation of the *a* and *i* series in Slavonic," and disproves in the most convincing manner the existence assumed by Schleicher of a series produced by *a* and *i* vowels in combination. Where Schleicher sees in the relation of *r̄(rīci)*, *ē(rekā)*, *ō(po-rokū)*, *ī(pro-ricati)*, *ɛ̄(na-rēkovati)* a series of increments founded on *t̄*, the author shows that the vowels which appear in this series are related to each other in such a way that the *ē* in *rekā*, which corresponds to an *a* in the original language, is the fundamental sound, of which the *t̄* in *rīci* is the weakening, the *ɛ̄* in *na-rēkovati* the lengthening, while the *ō* in *po-rokū* is its mutation (*Umlaut*); on the other hand, the *ī* in *pro-ricati* comes from the lengthening of the *t̄* in *rīci*.

The remainder of the part before us relates to the influence exerted by nasals on preceding vowels. The author shows how the consequences of this are the lengthening, the increment, and the qualitative transformation of preceding vowels. His researches present manifold points of contact with the works of his predecessors, but he has the merit of having considered the phenomena in a larger connection, arranged them under more general points of view, and treated them with such skill that the results obtained are of wide reaching importance not only for the development of the Indo-Germanic vowel-system, but also for the so-called variation of roots in general. He pursues these three varieties of the transformation of vowels produced by nasals in the different divisions, groups, branches, and languages of the Indo-Germanic family, e.g. the lengthening of vowels, 1, in the Aryan group; 2, in the German; 3, in the Lithuanian; 4, in the old Bulgarian; 5, in the North European group in general; 6, in the Celtic; 7, in the Latin; 8, in the Greek; 9, in the Græco-Italian (the common foundation of Greek and Latin); 10, in the European division in general. One of the most important results is the explanation of transitions from the *a*-series into the *i*-series through the influence of a following nasal, e.g. that of the *a* in *grabh*, a word of the original language, into the *ei* of the corresponding Gothic *greip* through the intermediate *grimp*, which stands in the same relation to *grabh-nā* of the original language (this is the theme of the present of *grabh*, and becomes *gribhnā* in Vedic Sanskrit) as, e.g. the Latin *jung* in *jungo* to the Greek *ζευν*. But the importance of the book seems to us, as already indicated, to lie chiefly in the fact, that, through the researches it contains, it offers a strong opposition to the still widely spread opinion of a variation of roots in the Indo-Germanic family. The fact demonstrated by our author, that

the difference of vowels, hitherto so obscure, in many radical elements which in other respects are alike, is the result of purely phonetic and mechanical influences, renders it in the highest degree probable that the same change was brought about by merely mechanical causes in the other cases, which have not yet been explained. This result will lead to attempts to discover these causes as well as the others, and we have no doubt that the attempts will be crowned by success.

We have already indicated that many of the author's results still appear to us questionable, in particular those which relate to increments of vowels produced by the influence of nasals. To enter into details would encroach too much on the limits of this journal, and would also in our opinion be inopportune, since it is possible that these difficulties will be removed in the course of the work. In fact, the sequel will alone enable us to form a definitive judgment, and we therefore look forward with hopeful interest to its appearance.

TH. BENFEY.

Conington's Virgil, Vol. III., containing the Last Six Books of the *Aeneid*. Whitaker and Co., 1871.

In the introduction to the first volume of his *Virgil*, Mr. Conington defined the scope of his edition. It was to be a commentary rather than a work of original critical research. This plan has been observed throughout; the textual criticism is merely incidental; the characteristic of the book is close and searching interpretation.

But it would be very far from true to say that Mr. Conington had done nothing for the text. The text of Virgil in its present state is one to which a scholar with the peculiar gifts of Mr. Conington could render good service without doing original work as a collator. It is a text of the same kind and in much the same condition as that of Sophokles. The number of great difficulties upon which farther light from MSS. can be looked for is very small; and the solution of the minor questions which can still be profitably discussed depends mainly on an intimate sympathy with the poet's mind and diction. The language of Virgil, like that of Sophokles, never deserts the idiom of common life, yet is always above it, being controlled by a genius at once fastidious and sane—a genius always masterly in its boldness, because always conscious of the precise limits which good taste imposes on originality. Emendation of a poet becomes indefinitely more dangerous when he is also a subtle artist in words, with a distinctive theory of expression. If a few lines from Milton, Tennyson, or Rossetti, with a few small gaps left for the purpose, were proposed for conjectural emendation by students of English, the result would probably be a help towards estimating the felicity with which confident critics have sometimes restored Sophokles or Virgil. Mr. Conington had a consummate and perfectly trained tact in language; he was an exquisite Latin composer; the sympathetic insight which was one of his chief literary gifts had long been concentrated upon Virgil; and where he had nothing positive to suggest, he could generally decide at least what was not and could not be true. The great service which Mr. Conington has done to the text of Virgil has been in protecting it, with the help of this fine and sure instinct, from the ingenious conjectures of former editors. Ribbeck's critical edition, giving collations of all the uncial MSS. and of the chief cursives, supplied the apparatus used by Mr. Conington in the *Aeneid*. But in two papers on Ribbeck's *Prolegomena*, reprinted in this volume from the *Journal of Philology* (vol. i. Nos. 1 and 2), Mr. Conington has pointed out how often he was obliged to differ from Ribbeck and others in their treat-

ment of the text. It seems to us that, in every one of these instances, Mr. Conington's judgment has been sound. To take a few examples from the last six books: in *Aen.* vii. 430, Mr. Conington defends "arma" against Peerlkamp's "arva :" in viii. 211, "raptos" against Wakefield's "raptor :" in ix. 67, "quae via" against Ribbeck's "qua vi :" in ix. 146, "sed" against Ribbeck's "sic" (who would transpose vv. 146, 147 to a place after v. 72) : in ix. 676, "armis" against Peerlkamp's "animis :" in xii. 55, "moritura" against Ribbeck's "monitura." In ix. 226, "Ductores Teucrum primi, delecta iuventus," he shows conclusively that Ribbeck and Peerlkamp are wrong in wishing to insert "et" before "delecta :" and in xi. 471 *f.* rightly condemns Ribbeck's transposition of "accepit" and "adsiverit."

It is to be regretted that the plan of the *Bibliotheca Classica* prevented the separation of the critical notes from the commentary. If the critical notes which are scattered through the commentary could have been collected and printed together immediately under the text, it would have been a great improvement. Any thorough student of a classic necessarily goes through the same process as an editor. First, he enquires how the text ought to stand ; then comes interpretation, then illustration. It is inconvenient to be obliged in the first instance to disembed the critical notes from the explanatory and illustrative notes.

As in the first two volumes, the commentary is admirable in its way. Mr. Conington has described his own method of working : "My custom has been to take every line as it came before me, and to ask myself whether I thoroughly understood it." He has spoken, too, of the delight which he found "in tracing, word by word, the delicate intricacies of expression, which stimulate curiosity while they baffle analysis." The result has been that the commentary is, beyond other commentaries, the mirror of the interpreter's mind in regard to his author : it does not merely explain how he understands the hard or doubtful things : it shows how every phrase, every shade of expression, affected him. There is just one wish, perhaps a little ungrateful, which such a commentary suggests ; it makes one wish for a translation, being itself, to a great extent, the rather diffuse analysis of a mental translation. Mr. Nettleship may be congratulated on having maintained, in his notes to the tenth and twelfth Books, the peculiar merits of a commentary so distinctive in character and so difficult (one would have thought) for another hand to continue. There is one difference, indeed, to be noted. Mr. Conington, as his colleague has observed, was more attracted by the linguistic than by the real side of Virgil's writings ; the grammatical and literary interest predominated, for him, over the antiquarian interest. The notes to Books X. and XII., as compared with those to the other Books, show attention more evenly divided between interpretation and illustration. At the end of the volume Mr. Nettleship gives, as an excursus on Book XII., an interesting paper "On the Lengthening of Short Final Syllables in Virgil"—a paper which appeared before Corssen had published the second volume of the second edition of his *Aussprache*, but which coincides with it in its main conclusions.

R. C. JEBB.

Manual of Old Bulgarian Grammar. [Handbuch der albulgarischen Sprache. Grammatik. Texte. Glossar. Von A. Leskien, A. D. Professor der Slawischen Sprachen zu Leipzig.] Weimar : 1871.

PERHAPS nothing indicates more clearly the rapid growth of philological studies in Germany of late years than the establishment by the university of Leipzig of a professorship of the Slavonic languages—the result of a purely scientific impulse unaided and unbefriended by extraneous circum-

stances, as the reader need not be told that no love is lost between the Germans and Slavonians of the present day. On the other hand, one cannot shut one's eyes to the fact that the university just mentioned is the only one that makes serious efforts to adapt itself to the growing wants and requirements of comparative philology. Leipzig evidently means to maintain this character, for it is said that even the Celtic languages are to find a much needed refuge in that seat of learning, where no less promising a scholar than Dr. Windisch, who already lectures on them, may be expected by and by to be settled there as their professional exponent. It is just to say that in the case of Slavonic the way had been amply prepared in Germany by the labours and researches of Schleicher, and it may be gratifying to some of the readers of the *Academy* to know that Leskien is regarded by those who know him as a living Schleicher : like him he has a complete acquaintance with the chief Aryan languages, and like him he makes the Slavonic group of the same his special study. Leaving out of consideration his extensive knowledge of the non-Aryan languages of Europe, his ready and practical familiarity with the Slavonic tongues of modern times and all that is believed and written respecting them by native scholars, the fact of his being a German seems to give him a decided advantage over persons whose mother-tongue is Slavonic ; for the latter seldom seem equal to the task of defamiliarising themselves with the ordinary vehicle of their thoughts, and are every now and then liable to project on a language of respectable antiquity the peculiarities of modern dialects. Even such a scholar as Miklosich sometimes shows symptoms of this kind of weakness.

Before proceeding to the *Grammar of Old Bulgarian* it may be well to show what is meant by Old Bulgarian. Now there is a dispute as to the name by which the language to which belong the oldest Slavonic documents should be called—a dispute not very unlike the following, which I take the liberty of imagining on Romance ground. Let us suppose the name Latin had not been transmitted to posterity, whereas a quantity of MSS. in that language had been preserved and the language itself continued very much what it now is, namely, the church-language of western Europe. A Spanish scholar, let us say, comes forward and says—"It is all very well for you ecclesiastics to call the jargon you read and write, mixed up with the accent and idioms of your respective nations, by the name Church-Romance, but we want the language you thus murder to be known by a name which would tell us something respecting its pedigree and relation to languages now in use : I venture to call it Old Spanish." This of course would not fail to stimulate Italian scholars to claim Latin as Old Italian, while persons not wishing to take sides in the contest would, at the risk of being inaccurate, call it the Old Romance tongue. This is very much the case with Slavonic scholars. Miklosich calls Leskien's Old Bulgarian Old Slovenic, whereas Schleicher would have it that Old Bulgarian is the more appropriate name. On the other hand, the term Old Slavonic has a tendency to spread a notion that it is equally nearly related to all modern Slavonic languages, and accountable to a certain extent for all their peculiarities and idioms, which, of course, it is needless to say, is not the case. Perhaps the name "Church-Slavonic" may still be useful as denoting that form of Old Slavonic which forms the religious language of the Greek church in Slavonic countries, and as such is, in the mouths of moderns, Russianised and Serbianised by Russians and Serbians respectively.

To place in his pupils' hands specimens of Old Slavonic purged of these local incongruities and modernisations was Leskien's object when undertaking to compile the present volume. Indeed, so great was the difficulty of procuring such

text at Leipzig last year* that I considered myself very fortunate in being able to use this work as it began sheet after sheet to drop from the printer's hands. The critical process of arriving at something like unadulterated Old Slavonic is a difficult one, the details of which cannot help eliciting from Slavonic scholars a variety of opinions, which may in time lead to satisfactory results. One item of help is evidently a careful comparison of the chief local varieties of MSS., namely, those of Russia, Serbia, and Bulgaria. A part of the present chrestomathy has been so arranged as easily to show the contrast between these. The remaining items must be supplied by comparative philology, which establishes the general sequence of phonetic modifications nearly as irreversibly as geology does the order of the strata which compose the crust of the earth. A ready instance is that of the insertion of *l* between labials and *j*, where the sequence is easily shown to be, for instance, in the part. perf. passive of such a verb as *ostaviti*, the following—*ostavjenij*, *ostavlenij*, *ostavljenij*. This is, by the way, a point which imparts an incidental value to the Glagolitic fashion of writing, of which Leskien has given in his Chrestomathy a short specimen for the sake of acquainting the reader with the nature of the character.

As to the contents of Old Slavonic MSS. one must frankly admit, that they contain little that would gratify the student of literature, as the majority of them are mere translations from Greek, with a few from Latin, mainly of the Bible and certain legends about saints and martyrs; at times, indeed, the rendering is so literal as to make but suspicious Slavonic, not to mention a multitude of compound terms which probably would never have existed but for their Greek originals. In fact, one may say that the student of Old Slavonic must continually correct his results by an equation of errors based on the data of the Slavonic languages which are still in use.

The Chrestomathy is, as might be expected, accompanied by a copious glossary which makes it easily used. This completes Leskien's original plan: afterwards, however, he was induced to premise a succinct account of the phonology and inflections of the language. All that is done in a scholarly way, and none of the latest results of philological investigations, as far as they have a bearing on the matter in hand, have been overlooked. It is much to be regretted that the author did not think it necessary to supplement this part of the book by a discussion of the structure of words and sentences in Old Slavonic: let us hope that in some shape or other this will by and by be done by him. However, the book as it is, cannot but be highly convenient and perfectly indispensable to such students of Aryan philology as cannot afford to make the Slavonic languages their special study.

J. RHFS.

TO THE EDITOR OF THE ACADEMY.

SIR,—Professor Lushington, of Glasgow, has requested me to state that the retention of the word *ἐπιγύματον*, in Soph. *Oed.* Col. 1491, is not due to him but to Hermann, who suggested this in his edition of 1841.

Professor Lushington mentioned this to me, together with an original suggestion of his own, respecting the metrical arrangement of the passage, which he reads thus:—

ll. 1492, 3:

ἐπιγύματον ἐγαλίφ
Ποσειδανίφ θεῷ τυχχάνεις,

answering to ll. 1479, 80:

διατρίσιος ἔτοβος ί-
λεως δαιμόνιον ίλεως εἰ τι γῆ.

Hence my mistake, which I trust you will give me the means of correcting, by inserting this in the next number of the *Academy*.

St. Andrews, January 17, 1872.

LEWIS CAMPBELL.

* This was written in 1871.

Notes and Intelligence.

Popular Tales and Epic Poetry (Volksmährchen und epische Dichtung), a lecture, by Theodor von Bernhardi, is a popular introduction to the attractive branch of philology which deals with the origin of the narrative element in literature. The true "Mährchen"—our term "fairy tale" is too narrow, and "popular tale" is too vague—is in its essence a fragment. Even if the incidents are worked into a complete story, there is always a supernatural element which remains unexplained, not because it is supernatural, but because it comes from a whole world of mythology long since forgotten. It often contains, moreover, an element of primitive history—not, perhaps, the traces of actual events, but of custom or feeling or local association—which remains in it as something taken for granted but no longer understood. The *Germania* of Tacitus gives the key to many stories in Grimm. The position of women, their knowledge of writing and of medicine (both regarded as magical arts), the golden hair of the Teutonic races, the divinity of the hearth and its fire, the sacredness of the horse—such points can be shown to underlie many of these tales, even in the forms in which they are still told. It appears, however, that all "Mährchen" may be traced back to older "Sage:" that is to say, to traditions which are attached to a particular place or to the name of a historical person. Stories which are simple and childish in Grimm re-appear as heroic legend in the Icelandic cycle of the *Edda*, where they fall into their place in a general system both of mythological belief and of historical or quasi-historical events. The full explanation of "Sage" would consist in the separation of the historical from the mythological element: and this is seldom possible. So long as two things co-exist in unknown proportion, neither can be said to be completely determined. Much, however, may be done by comparing the different versions of a story, and thus freeing it from the admixture either of distinct legends or of later historical colouring. Herr von Bernhardi gives a good example in the Norwegian story of the two giants who find the husbandman ploughing, and know that their time is come to leave the country. In this, as he shows, we have the notion of an age of chaotic natural forces followed by that of gods and men. The same story is found again in Alsace: and there the giant, like the feudal lord, lives in his "rocky nest" supported by the husbandman's labour. Instead of primitive cosmogony we have as the *motif* the social contests of feudalism. The process by which ancient "Sage" becomes the matter of epic poetry is shown in two instances—the *Nibelungenlied* and the story of Lohengrin. The former has probably interwoven some great disaster of the Burgundian kings, and one or two historical names such as Attila and Theodoric, with the purely mythical stories of Siegfried and Brunhild. The latter is found in a Low German poem of the thirteenth century, in a form which makes Lohengrin a knight of the Sangraal, thus mixing his story with the Celtic legends of the Arthurian circle. There is a Flemish version, however, which knows nothing of the Sangraal, and turns on the Teutonic fancy of the swan-maidens. Herr von Bernhardi endeavours to show, in conclusion, that the greatness and enduring charm of epic poetry depends upon the relation in which it stands to the national tales and legends, and through them to the whole previous life of the nation. It follows that true epic poetry can only be produced in an "Urvolk:" that is to say, in a nation that has undergone no violent revolution in language or institutions. The *Nibelungenlied*, however, is rather to be considered as an interesting specimen of national poetry than as itself a poem of the highest order.

D. B. MONRO.

We have received the first number of a new Hungarian periodical entitled *Magyar Nyelvör*, "Hungarian Speechwatch" (Germ. *Sprachwacht*). The function it proposes to discharge, the censorship of the current Hungarian language, is one of great importance in a country where the great majority of writers are even more under foreign (*i. e.* German) influence than is the public which they address. The programme of the *Nyelvör* enumerates as within the sphere of its operations:—(1) The history of the language, pointing out the wealth of words contained in old books, documents, &c., especially in words whose revival may increase the present resources of the language. (2) The collection of materials for a fuller and more exact knowledge of the language of the peasantry in its various dialects, including among such materials songs, proverbs, toasts, nursery rhymes, and the local names of hills, valleys, streams, &c. (3) The criticism of the language of current Hungarian literature, including newspapers, with especial reference to the invention of words at variance with the true genius of the language. (4) The determination of questions relating to the peculiarities of the language, its syntax, the distinction of synonyms, and such like. (5) Notices of such discoveries in the field of philological enquiry as bear on the Hungarian language. Besides this programme the first number contains a defence of the title by the editor, M. Szarvas, from the charge of Germanism brought against it by a contributor, Dr. Budenz contributes two articles. The first points out as a defect of Hungarian grammars that they do not distinguish between those etymological suffixes which can still be used to form new words and those which have, so to say, become barren and incapable of entering

into new combinations. Dr. Budenz' second article criticizes from a philologer's point of view a recent republication of a work of Unitarian controversy belonging to the sixteenth century. Among the remaining contents of the number we notice a contribution by M. Paul Hunfalvy on the old Magyar calendar, an analysis by the editor of the language of Petőfi's *Káosz Vita*, and a choice anthology of bad Hungarian culled from the newspapers. The *Nyelvör* is to appear on the 15th of every month, with the exception of August and September. We wish it all success.

Readers of the *Rheinisches Museum* will rejoice to hear of the publication of a complete index to the first twenty-four volumes. The index seems very complete, and forms by itself a volume of 176 pages.

Vocabulista in Arabicum, pubblicato per la prima volta sopra un Codice della Biblioteca Riccardiana di Firenze da C. Schiaparelli. (Firenze, 1871.)—This is an old Arabic vocabulary in two parts, Arabic-Latin and Latin-Arabic, discovered in the Riccardiana library at Florence, by Sig. Amari, and now edited for the first time by one of his pupils. The date of its compilation is uncertain, but Amari refers the manuscript (which is evidently not the original) to the end of the twelfth or beginning of the thirteenth century. Between the two glossaries is a controversial dialogue, in pointed Arabic, between a Moslem and the author of the *Pugio Fidei*, Raymond Martin. A notice of the work by Sig. Lasinio is given in the *Nuova Antologia* for October, from which we derive these facts. The editor appears to have performed his task well, and the result is a not unimportant addition to our scanty information respecting the Arabic dialect of Spain.

At a meeting of the Bombay branch of the Royal Asiatic Society held on the 9th November last, Dr. Bühler read a paper on Śrīharsha, the author of the *Naishadha-charita*, a work of which that scholar is preparing a new edition for the Bombay Sanskrit Series. The account given by Dr. Bühler of the writer is mostly taken from the *Prabandhakosa*, composed in A.D. 1348, by Rājasekhara, a Jain writer. Śrīharsha is there said to have been born at Kāśī (Benares), and composed his work at the request of King Jayantachandra, the son of Govindachandra. From the reasons adduced by Dr. Bühler, it seems very probable that the patron of Śrīharsha was no other than Jayachandra, who reigned over Kanyakubja (Kanouj) and Benares in the latter half of the twelfth century (probably from A.D. 1168-1194).

Contents of the Journals.

Zeitsch. der deutsch. morgenländ. Gesellschaft, Vol. xxv. No. 3.—The explanation of the Avesta, by Fr. Spiegel. [A reply to Roth's remarkable paper in the last number.]—Poem of Jacob of Sarug on the palace which St. Thomas built in India, published by R. Schröter.—History of the translations from Indian into Arabic, and their influence on Arabic literature; with especial reference to the moon-stations (Naxatra), and treatises on lots; corrections, additions, and index to vols. xviii. and xxiv.; by M. Steinschneider.—A Nabathæan inscription from Ammonitis, deciphered by M. A. Levy. [See Quarterly Statement of the Palestine Fund, No. vi.]—"Authorship and Translation," how expressed in Hebrew, by Dr. Zunz.—The criticism of the Biblical Assyrian chronology, by Dr. Schrader. [The author explains his grounds for rejecting M. Oppert's attempt to bring the lists of Assyrian eponyms into harmony with the chronology of the Books of Kings.]—Unpublished strophes of various poets, continued, by Th. Aufrecht.—Additamenta on the inscription of Mesha, by C. Schlottmann; vi. Fixation of the text, a letter to Prof. Hitzig.—A Hebrew book from Calcutta, by Dr. Geiger. [A modern collection of liturgical songs.]—Contributions to the knowledge of the geographical and linguistic relations of S. Arabia, by H. v. Maltzan. [The author made the acquaintance in Cairo of a number of Arabs from the south, from whom he gained much information as to the dialect of Hadramaut, &c. The pronunciation of the latter bears a close resemblance to that of the dialect of the Fellahs. The *census rectus* of the plural is still in occasional use, and is not quite expelled by the *census obliquus*, as in almost all the other dialects. There seems, too, to be an extraordinary similarity between many expressions of the Algerian and the southern Arabic dialect. The accuracy of Wrede's geographical statements is confirmed.]—Explanations with Dr. Blau, by F. Prætorius.—Two Jewish physicians, by M. Steinschneider.—On the radical meaning of יְהִי, by G. M. Reddlob.—Reviews:—Spiegel's *Eran. Alterthumskunde*, and Kuhn's *Kaccayanæ Namakappa*, by A. W.—Bickell's *Conspectus*, by Geiger.—Wright's Catalogue of Syriac MSS., part ii., by Nöldeke and Geiger.

Tijdschrift voor Indische Taal-, Land- en Volkenkunde, Batavia, serie vi. deel i. (1870).—Aflevering 1 and 2.—Hindoe-monumenten in de bovenlanden van Palembang, als bron van geschied-kundig onderzoek, door E. P. Tombrink. [The inhabitants of Palembang, the north-eastern part of Sumatra, are said to be a mixture of Hindus, Javanese from Modjopahit, and Malaysians from Menang-Kebau. From the monuments discovered, and of many of which plates are given along with this paper, the writer maintains that the Hindu

settlers were principally worshippers of Siva, though not of the Linga. The remains mostly found on plateaux commanding extensive views are said to represent Siva, Durgâ, Ganessa, and Nandi, the bull. From their being of a much ruder character than those found in Java, he feels inclined to assign a much earlier date to them, and to assume that a direct immigration from the Indian continent to the east of Sumatra took place during the earlier centuries of our era. For the aboriginal inhabitants of these parts he looks to the Orang Koeboe, still subsisting in the jungles, and probably akin to the Dajaks of Borneo.]—De Landschappen Holontalo, Limoeto, Bone, Boalemo en Kattinggola, op Andagile, geographische, statistische, historische en ethnographische aanteekeningen door J. G. F. Riedel. [The districts here described form the central part of the northern neck of Celebes.]—Review, by A. B. Cohen Stuart, of *Geschiedenis van Java*, door J. Walbers. Erste deel. Oude Geschiedenis: Vor-Hindoe- en Hindoetijd; Middengeschiedenis, Mahomedaansche staten. Utrecht, 1868. [Very unsavourable.]—Verslag van een Reis van den Assistant-Resident van Benkoelen naar het eiland Engano. [The inhabitants of this island, situated south of Sumatra, are described as differing greatly from both the Malays and Bataks, and to have more of the Nias race in their appearance.]—Aflevering 3.—Geschiedenis der Soenda-Landen. Hoe het land van Soenda onder het oppergebied van De Compagnie kwam. II^e periode. Derde tijdwak. Door J. Hageman.—Soendasche Spreekwoorden, door K. F. Holle. [Continuation; containing 160 proverbs in the Sunda dialect, with a literal translation and an explanation.]—Review, by A. B. Cohen Stuart, of *Vervolg op Dr. J. F. C. Gericke's [and T. Roorda's] Javaansch-Nederduitsch Woordenboek*, samengesteld door P. Jansz, Evangelie-zendeling op Java. Samarang, 1869. [Very favourable.]—Aflevering 4 and 5.—Eenige opmerkingen op drie kleine geschriften, waarmede de heer Klinkert als schrijver is opgetreden, door H. van de Wall. [The papers of H. C. Klinkert, printed in the *Bijdragen tot de Taal-, Land- en Volkenkunde van Ned.-Indië* (1866 and 1868), and severely criticized and annotated upon in this article, are:—1. Jets over de Maleische school- en volksleesboeken; 2. Eenige Maleische spreekwoorden en spreekwijzen; 3. Opmerkingen op Dr. J. Pijnappels *Geographie van Nederlandsch-Indië*.]—Chronologische lijst van gedenk- en legpenningen, &c., door J. S. van Coevorden. [Continuation.]—Briefe van H. N. van der Took betreffende het Lampongsch. [These letters contain various contributions to the knowledge of the dialect of Lampong, the south-eastern extreme of Sumatra, consisting of lists of words, bits of poetry and prose, sayings, &c.]—Aanteekeningen over de hoofd-tempels in Kadoc en Djokdjokarta. Door R. H. T. Friederich. [The temples of Boro Boedo, Mendoet, Prambanan, Plawangan, and others at the foot of the Merapi (in Java), show Buddhism to have been the more favoured creed during the times when these monuments were erected (the inscriptions found vary in their dates between A. Saka 746 and 870), though the Saiva creed was still prevalent among the mass of the people, and some of the remains exhibit a curious amalgamation of Brahmanical and Buddhist mythology.]—Kitab Pakih Soenda, door J. J. van Limburg Brouwer. [A theological Sunda text, by an unknown writer, transcribed in Roman characters, with a Dutch translation.]—Snippers. Door K. F. Holle. [Continuation. Notes on the views and manners of the natives of the Indian Archipelago.]—Over de spelling van het Soendaneesch met Latijnsch letterschrift, door G. J. Grashuis. [Rigg's and Holle's methods of transcription are here compared, and the latter is adopted, with slight modifications, as the more useful.]

Bijdragen tot de Taal- en Volkenkunde van Nederlandsch-Indië, vijfde deel, 3^e stuk ('s Gravenhage, 1871).—Stukken betrekkelijk de verdediging van Ternate door den Gouverneur Willem Jacob Cranssen, 1800-1801, en de overgave van het Gouvernement aan de Engelschen, &c.—Zesde deel, 1^e stuk, 1871.—Reports of meetings, &c.—Transcriptie van Indische Plaatsnamen.—Korte opmerkingen over Balineesch en Kawi, door H. Kern. [Notes on the etymology and meaning of some Balinese and Javanese words.]—Varia. Door v. L. B. [On Dr. Socin's discovery of the Syriac text of Kalila and Dimna. On Kawi inscriptions. Notices (favourable) of Prof. H. S. Maine's Lectures on Village Communities in the East and West; and T. T. Cooper's Travels of a Pioneer of Commerce in Pigtail and Petticoats; or, an Overland Journey from China towards India.]

Journal Asiatique, No. 65.—Rapport sur les Travaux du Conseil de la Société asiatique pendant l'année 1870-1871, par M. E. Renan. [Opens with a tribute to the memory of deceased members of the society, especially MM. Caussin de Perceval and Devéria. Semitic and Egyptian studies have been less disturbed by political events than Indo-European. We notice that M. Renan discovers in the Himyaritic monument, published in the *Journal* by M. Ganneau, a resemblance to the Buddhist bas-reliefs representing the life of Sakyamuni.]

The Pandit, vol. vi. Nos. 64-67 (Benares, Sept.-Dec. 1871).—The Tarkapâda of Gâgâbhâta's Bhâttachintâmani, ed. Bâlaśâstri. [Concluded in Nos. 64 and 65.]—Amarachandra's Bâlabhârata. [The forty-fourth and conclusive sarga. (No. 64.)]—The Tattvamuktavâli, a Vedântic treatise by Pûrnânanda, ed. Vecharanârâmaśarmâ. [Completed in No. 64.]—The Gopâlalîla, a poem by Râmacandra, ed. Vechana-

râma. [Sargas 1-8 (Nos. 65-67).] — The Viddhaśālbhanjikâ, a drama by Bâlakavi, ed. Vâmanâchârya. [Acts 1-3, in Nos. 65-67 resp.] — The Aphorisms of the Yoga Philosophy of Patanjali. The Sanskrit text and an English translation of the Sûtras and Commentary. By G. D. [Continued from Book IV. Aph. 19-33.] — The Vaiśeṣhika Aphorisms of Kanâda. The Sanskrit text and an English translation of the Sûtras and Commentary. By A. E. G. [Continued in No. 64 and 67, from Book I. Lesson 1, Aph. 2-15; Lesson 2, Aph. 1 and 2.] — Translation of the Siddhânta-Muktâvalli's explanation of verses 11 and 12 of the Bhâshâ-Parichchhedâ. By A. E. G.—Catalogue of Sanskrit MSS. [Continued.]

Revue Critique, Jan. 6.—H. Weil reviews Hense's *Heliodoreische Studien*, introducing some valuable remarks of his own on the subject of Heliodorus.—Ch. Thurot examines the second part of Lübbert's *Grammatical Studien* (treating of the construction of the Latin *quum*), and pronounces it a careful summary of the facts, though disagreeing with the writer's method and controverting his conclusions. But surely M. Thurot goes to the opposite extreme, and exaggerates the uncertainty of the subject, when he says, "le subjonctif est un luxe du langage."—Jan. 13.—The philological articles in the number are a notice (anonymous) of a dissertation by Th. H. Martin (the well-known editor of the *Timaeus*) on certain optical instruments erroneously attributed to the ancients; and an elaborate and discriminating account (by Ch. Morel) of our chief modern histories of Roman literature, those of Bähr, Bernhardy, Hübner, and Teuffel: a French work by M. Paul Albert on the same subject is likewise briefly noticed.

Rheinisches Museum, vol. xxvii. pt. 1.—A. Rapp: The Maenads in the Greek worship, in art and poetry (Part I).—E. Rohde: The sources of Iamblichus in his Life of Pythagoras (conclusion). [Points out his debt to Apollonius and Nicomachus, and indirectly to earlier writers.]—J. Steup: Reply to Teuffel's *Probus in Martial und Gellius*.—C. Wachsmuth: Scattered fragments of the *Elogue* of Stobaeus in his *Florilegium*. [Contains most important suggestions for the restoration of the *Elogue*.]—G. Krüger: On Horace. Defends his emendation *tu liques* in *Od.* i. 20, 10; and in *Sat.* i. 6, 14, proposes to take *notante iudice quo nōsti populo* as = *quam notantem iudicem quem nōsti populum*.—F. Blass: On Antipho. [On the text in the MSS.]—W. Teuffel: The *Historia Apollonii regis Tyri*. [Shows amongst other things that the Sloane MS. has been underrated by Riese.]—F. Ritschl: The *Persae* of Aeschylus in Egypt: a new Simonideum. [Describes a newly-discovered MS. and shows very conclusively that it is a modern fabrication. It is not very reassuring to find that possibly the famous Simonides is still living and engaged in literary work for the Russian government!]—F. Bücheler: *Inscriptiones latinae iambicae*. [Specimen of an edition of a Latin Anthologia epigraphica.]—J. H. Mordtmann: Greek inscriptions from Arabia.—F. Rühl: Pompeian inscriptions.—W. Helbig: Hiero II. and Philistis on a relief from Agrigentum.—M. J. Höfner: The contemporary history in Dio Cassius.—F. Rühl: On Zosimus.—K. Dzietko: Hauton timorumens or Heauton timorumenos? [Terence wrote in all probability *Heauton*.]—L. Müller: The Neapolitanus of Propertius. [Corrects a remark of Haupt.]—N. Wecklein: On Sophocles and Euripides.—C. Badham: *Philebi Platonici emendationes*.—M. Voigt, J. Vahlen, O. Ribbeck: On Plautus.—O. Ribbeck: On Lucilius and Coniecturae Suecanae.—L. Müller: On Catullus, &c.—E. Bährs: On Ovid and Calpurnius.—J. Vahlen: On Cicero.—F. Ritschl: Canticum and Diverbum in Plautus.

Zeitschrift für die österreichischen Gymnasien, xxi. 7 and 8.—J. La Roche: Die Thitthemimeres im Homerischen Hexameter. [Carefully classified lists of instances of short syllables lengthened in the second arsis: the text is often corrected by the help of Professor La Roche's collations.]—F. Krones: Zengenverhör über Baumkircher's Thatenleben und Ende. [Holds that the current view of this Styrian hero is not historical at all, but traditional, and quite erroneous.]—Anthologia latina, fasc. i. recens. Alex. Riese (Teubner), rev. by Mähly. [Suggests a number of conjectures, more or less probable.] Georg Curtius: Erläuterungen zu meiner griechischen Schulgrammatik. Rev. by Hartel. [Neither Kühner nor Westphal has produced a satisfactory grammar for modern requirements. The reviewer makes many valuable remarks, especially on the importance of linguistic knowledge for Homeric prosody, often thought to be full of mere irregularities.]—Corn. Taciti Historiarum libri qui supersunt. Schulausgabe von Heräus. 2. Bd. Lib. iii.-v. (Teubner series, with German notes.) Rev. by Prammer. [Not so conveniently arranged for a school book as Dräger's *Annals*, in the same series. The notes on the history and geography are good; but the book shows a want of form, and is marred by many misprints.]—Meister: Ueber Dares von Phrygien, *de Excidio Troiae historia*. Programm. Rev. by Schmidt. [The writer, who is preparing an edition of Dares for the Teubner series of texts, gives us heré the results of his examination of the MSS. They are greatly corrupted through the popularity of Dares in the middle ages, with the exception of one MS. B. at Bamberg. Meister also deals with the literary history of this curious composition.]—Blass: Ueber die Aussprache des Griechischen. Rev. by Hartel. [Justly praises this little work,

which treats of the main points of the question, and establishes the claims of the Erasmian against the Reuchlinian pronunciation in a learned, original, and convincing manner.]

Philologischer Anzeiger, iii. 7.—R. Kühner: Ausführliche Grammatik der griechischen Sprache. 2. Aufl. [Re-written, incorporating the results of modern linguistic science, in a form that is of great practical value, if not always perfect in point of scientific statement.]—W. Büchner: Die Ebene von Troia. [Seems to proceed on a false method.]—M. Vermehren: Platonische Studien. [Discusses 118 passages, chiefly from the Symposium, Republic, Laws, and Phædo. The reviewer, D. Peipers, goes over the greater part of them.]—C. F. G. Meutzner: De interpolationis apud Demosthenem obviae vestigiis quibusdam. [Applies this way of getting rid of difficulties to passages especially of the Olynthiac and Philippic orations.]—A. Hug: Commentatio de pseudo-demostenica oratione adversus Zenothemin. [Pronounces it a forgery by a person of little acquaintance with judicial or commercial affairs.]—Index lect. in univ. Berolinensi per sem. hibern. 1871-72 habendarum. [Contains a dissertation by M. Haupt, giving specimens of dialogues, Greek and Latin, from a MS. of the ninth century, and promising a complete collection.]—G. Studemund: Emendationes Plautinae. [Results of the laborious care bestowed by Studemund on the Ambrosian codex.]—P. Willems: Les antiquites romaines envisagées au point de vue des institutions politiques. [Intended for students of jurisprudence.]—H. Th. Plüss: Die Entwicklung der Centurienvorlassung in den beiden letzten Jahrh. der römischen Republik. [Places the reform in 241 B.C., and agrees with Niebuhr and Puchta against Mommsen, Lange, &c. in supposing 70 centuries. The writer's own theory of a complete change made in 179 B.C. in the nature of the classes is not borne out by Liv. xl. 51.]—G. Kramer: Carl Ritter, ein Lebensbild. —iii. 8.—Reviews several Homeric dissertations, of which those of E. Kammer ("obelising" the scene with Æneas, ll. 20, 79-352, and the Battle of the Gods, ll. 20, 32-72; 21, 391-518) and K. Weidenkaff (on the use of the genitive) seem the most important.—Fr. Heimsöth: De vitiorum in veterum scriptorum codd. obviorum generibus a Madvigio Hauniensi nuper definitis. Rev. by E. v. L. [Valuable criticism of Madvig's book.]—R. Petersdorf: Diidorus, Curtius, Arrianus quibus ex fontibus . . . hauserint. Rev. by E. S.—H. Kühlein: Observations de usu particularum in libris qui vulgo Hippocratis nomine circumferuntur. [Careful and methodical criticism.]—J. Caesar: Conjectanae critica. [Chiefly on Galen and Plutarch.]—H. Holzer: Der Hildesheimer antike Silberfund. Rev. by L. G. [Believes that it was originally the plate used at the table of Germanicus.]—K. Woermann: Ueber den landschaftlichen Natursinn der Griechen und Römer. Rev. by L. Schmidt. [Distinguishes well between sympathy with individual objects in the world of nature, shown in fables, similes, &c., and feeling for landscape proper; regards the latter as very much the growth of the Alexandrian period, but underestimates too much the feeling shown, e.g. in the Phædrus of Plato, and by Aristophanes and Pindar.]—R. Sohm: Die altdutsche Reichs- und Gerichtsverfassung. Bd. 1: Die fränkische Reichs- und Gerichtsverfassung. [An important and valuable work, intended to supplement the works of Waitz and Roth. Carries out the proof that the early condition of the German races was one of order and advanced constitutional development. Holds that the assembly of the *centena*, the *pagus* of Tacitus, was only judicial, and without political functions, the political unit being even then the *civitas*.]

New Publications.

BRASSEUR DE BOURBOURG. Bibliothèque mexico-guatémaliennes, précédée d'un coup d'œil sur les études américaines dans leurs rapports avec les études classiques. Paris: Maisonneuve.

CATALOGUS CODICUM LATINORUM Bibliothecae Regiae Monacensis. Secundum A. Schmelleri indices componerunt C. Helm, G. Laubmann, S. Meyer. Tom. 1 pars 2. München: Palm.

FUCHS, E. Die Scholien d. Bar-Hebraeus zum 23. u. 29. Psalm. Halle: Buchh. d. Waisenh.

TABARI. Chronique de Tabari, traduite sur la version persane de Belcam . . . par H. Zotenberg. T. 3. Paris.

THIELE, R. Prolegomena ad Hymnum in Venerem Homericum quartum. Halle: Buchhg. des Waisenhauses.

VELSEN, F. A. VON. Ueber den Codex Urbinas der Lisistrata u. der Thesmophoriazusen d. Aristophanes. Halle: B. des Waisenhauses.

WESTPHAL, R. Elemente d. musikalischen Rhythmus mit besond. Rücksicht auf unsere Opernmusik. Jena: Costenoble.

ERRATUM IN NO. 40.

P. 26, col. 1, line 37, for "in the same place" read "in the *Revue des deux Mondes*."

* It is particularly requested that all applications for back numbers, extra copies, subscriptions, advertisements, &c. be addressed to the Publishers, *not* to the Editor.

THE ACADEMY.

"INTER SILVAS ACADEMI QUARRERE VERUM."

Vol. III.—No. 42.

Readers are reminded that the mention of *New Books, Articles, &c.*, in our lists is intended as a guarantee of their importance. The Editor of THE ACADEMY cannot undertake to return communications which are not asked for. The next number will be published on Friday, March 1, and advertisements should be sent in by February 26.

The Second Volume (October 1870 to December 1871) is now ready, bound in cloth, price 15s. Covers may be had of the Publishers, price 2s.

General Literature.

La Réforme intellectuelle et morale de la France.
Par Ernest Renan. Paris : 1871.

BURKE says, speaking of himself :—

" He has never professed himself a friend or an enemy to republics or to monarchies in the abstract. He thought that the circumstances and habits of every country, which it is always perilous and productive of the greatest calamities to force, are to decide upon the form of its government. There is nothing in his nature, his temper, or his faculties, which should make him an enemy to any republic, modern or ancient. Far from it. He has studied the form and spirit of republics very early in life ; he has studied them with great attention ; and with a mind undisturbed by affection or prejudice. But the result in his mind from that investigation has been and is, that neither England nor France, without infinite detriment to them, as well in the event as in the experiment, could be brought into a republican form, but that everything republican which can be introduced with safety into either of them must be built upon a monarchy."

The name of Burke is not mentioned in M. Renan's book, but it is difficult to believe that Burke's publications of eighty years ago on the French Revolution, from which we have quoted the foregoing passage, were not in M. Renan's hands when he wrote his recent work. If it was so, it detracts nothing from M. Renan's originality ; a man of his powers cannot but be original in the treatment of his subject, and to have read and agreed with Burke will not make him less so. But the similarity of the point of view strikes the reader in almost every page ; and certainly it will be no bad effect of M. Renan's book if it sends us back to those masterpieces of thinking and eloquence, the *Reflections on the Revolution in France*, the *Letter to a Member of the National Assembly*, and the *Appeal from the New to the Old Whigs*. They are far too little read. They need to be received with discrimination and judgment, and to common liberalism they can never be acceptable ; yet so rich is their instructiveness that a serious politician could hardly make a better resolve than to read them through once every year.

" You have industriously destroyed all the opinions and prejudices, and, as far as in you lay, all the instincts which support government." " You might, if you pleased, have profited by our example. You had the elements of a constitution very nearly as good as could be wished. You possessed in some parts the walls, and in all the foundations, of a noble and venerable castle. You might have repaired those walls, you might have built on those old foundations. You had all these advantages in your ancient States ; but you chose to act as if you had never been moulded into civil society, and had everything to begin anew." " Rousseau was your canon of holy writ."

These sentences are Burke's, and never surely could he have desired a better testimony to his wisdom than for a

VOL. III.—NO. 42.

man like M. Renan to say eighty years afterwards, with the France of the present moment before his eyes :

" If no more had been done at the Revolution than to call together the States-General, to regularise them, to make them annual, all would have been right. But the false policy of Rousseau won the day. It was resolved to make a constitution *a priori*. People failed to remark that England, the most constitutional of countries, has never had a written constitution, drawn out in black and white." (P. 7.)

That the rights of its history do more for a society than the rights of man, that the mere will of the majority is an insufficient basis for government, that France was made by the Capets, that she ought never to have broken with them entirely, that she would even now do well to restore them, the younger branch of them, if the elder is impracticable, that with the monarchy she ought to form again aristocratic institutions, a second chamber, and, to some extent, a hereditary nobility—this is the main thesis of the new part of M. Renan's volume. If this is not done, France, he thinks, cannot hope to vie with Prussia, which owes its victory to its aristocratic organisation and to the virtues of endurance and discipline which this organisation fosters. France's only hope of revenge must then be in the International. The superficial jacobinism, the vulgar republicanism, the materialism (for by all these names and more does M. Renan call it), which the French Revolution introduced, and which has brought France to her present ruin, has fatal attractions for the crowd everywhere ; it has eaten far into the heart and life of England ; it has overrun all the Continent except Prussia and Russia. Prussia too is very probably doomed to enter into this "way of all flesh," to be forced into "the whirl of the witches' sabbath of democracy ;" and then Prussia's day, too, is over, and France is revenged. At the same time M. Renan suggests certain reforms in French education. These reforms may at any rate, he thinks, go forward, whatever else the future may have in store for us : whether a Capet at Rheims or the International at Potsdam.

All this makes the new part of M. Renan's volume. He has reprinted here, besides, his two letters to Dr. Strauss and several other publications occasioned by the late war ; while the volume ends with an essay on Constitutional Monarchy in France, and another on the respective share of the family and the State in the work of education, which appeared before the war began. These two essays may rank with the best things M. Renan has written, and to read them again heightens our admiration of them. The new part of the book abounds with ingenious and striking thoughts, eloquently expressed ; yet this part will not entirely satisfy the friends of M. Renan, nor does it quite answer, to say the truth, to the impression left on us by the summary of its contents which we read in the *Times* before the book appeared. It has not the usual consummate roundness of M. Renan's composition, the appearance of having been long and thoroughly prepared in the mind, and of now coming forth in perfect ripeness ; there are, or we seem to see, marks here and there of haste, excitement, and chagrin. This was perhaps inevitable.

Our business is not with politics, foreign or domestic ; yet on one or two of the political points where M. Renan does not quite satisfy us, we must touch. We will not ask whether France in general has not let the idea of dynastic attachment, as M. Renan calls it, and the remembrance of its historic self before 1789, so completely die out that it is vain to seek now to restore them, although, when Burke wrote, this might still have been possible. But we will observe that this restoration has, in any case, an enemy more serious and more respectable than that vulgar jacobinism, with no higher aim than to content the envy and the materialistic cravings of the masses, which M. Renan assails with such

scorn ; it has against it the republicanism of men, for instance, like M. Quinet. This republicanism is a reasoned and serious faith, and it grows not out of a stupid insensibility to the historic life and institutions of a nation, nor out of a failure to perceive that in the world's progress, as M. Renan eloquently and profoundly urges, all cannot shine, all cannot be prosperous, some sacrificed lives there must be ; but it grows out of the conviction that in what we call our civilisation this sacrifice is excessive. Our civilisation in the old and famous countries of Europe has truly been, as M. Renan says, in its origin an aristocratic work, the work of a few : its maintenance is the work of a few ; "country, honour, duty, are things created and upheld by a small number of men amidst a multitude which, left to itself, lets them fall." Yes, because this multitude are in vice and misery outside them ; and surely that they are so is in itself some condemnation of the "aristocratic work." We do not say that the historic life and continuity of a nation are therefore to be violently broken, or its traditional institutions abandoned ; but we say that a case has been made out against our mere actual civilisation, and a new work given it to do, which were not so visible when Burke wrote, which would certainly have fixed the regards of Burke now, and which M. Renan too much leaves out of sight.

A mere looker-on may smile to read at p. 153, written before Alsace and Lorraine were ceded and when there was still hope of saving them, that France could not survive their loss, that she is like a building so compact that to pull out one or two large stones makes it tumble down, or like a living being with an organisation so highly centralised that to have an important limb cut off is death ; and then to read at p. 58 and other passages, written since peace was made, that the immense resources of France are hardly at all altered or impaired, that she is *à peine entamée*. But of this kind of inconsistency a man of heart and imagination may well be guilty when his country is in question ; Burke, assuredly, might have been guilty of it.

Our one serious point of difference with M. Renan, and where we confess he somewhat disappoints us, is in his discussion of the faults of France. The capital fault, the cherished defect of France, is—what does the reader think?—want of faith in science, *le manque de foi à la science*. In the same strain speaks Mdme. Sand in the charming *Letters* she has lately published : *Nous voulons penser et agir à la fois*, she says ; and therefore we are beaten. Nay our amiability itself puts us at a disadvantage, she adds, in this bad actual world : *Nous ne sommes pas capables de nous préparer à la guerre pendant vingt ans ; nous sommes si incapables de haïr !* It is the head, *la tête*, which is so greatly in fault ; the heart, the sentiments are right ; *le Français*, says M. Renan, *est bon, étourdi* ; yes, *étourdi* he may be, harum-scarum ; but he is *bon*. Burke, whom we have so much quoted, says of Charles II. :

"The person given to us by Monk was a man without any sense of his duty as a prince, without any regard to the dignity of his crown, without any love to his people ; dissolute, false, venal, and destitute of any positive good quality whatsoever, except a pleasant temper and the manners of a gentleman."

So far he, too, was *bon* : but his goodness had gaps which, though certainly he was also without the scientific temper, would make us hesitate to say that his chief fault was want of faith in science. Of France we may say the same. It seems to us much more true of England than of France that the national defect is want of faith in science. In France the great defect lies, surely, in a much simpler thing—want of faith in *conduct*. M. Renan's chief concern at the failure of the Reformation in France is for what *the head* lost ; for the better schools, the reading, the instruction,

which the Reformation would have brought with it. But M. Michelet put his finger on the real cause for concern, when he said that the Reformation failed in France because a *moral* reformation France would not have. That sense of personal responsibility which is the foundation of all true religion, which possessed Luther, which possessed also the great saints of Catholicism, but which Luther alone managed to convey to the popular mind, earning thereby—little as we owe him for the theological doctrines he imagined to be his great boon to us—a most true title to our regard ; that was what the Huguenots had, what the mass of the French nation had not and did not care to have, and what they suffer to this day for not having. One of the gifts and graces which M. Renan finds in France is her enmity to pedantry and over-strictness in these matters : and in his letter to Dr. Strauss he says that, although he himself has been sufficiently near holy orders to think himself bound to a regular life, he should be sorry not to see around him a brilliant and dissipated society. No one feels more than we do the harm which the exaggeration of Hebraism has done in England ; but this is Hellenism with a vengeance ! Considering what the natural propensions of men are, such language appears to us out of place anywhere, and in France simply fatal. Moral conscience, self-control, seriousness, steadfastness, are not the whole of human life certainly, but they are by far the greatest part of it ; without them—and this is the very burden of the Hebrew prophets and a fact of experience as old as the world—nations cannot stand. France does not enough see their importance ; and the worst of it is that no man can make another see their importance unless he sees it naturally. For these things, just as for the more brilliant things of art and science, there is a bent, a turn. "He showed his ways unto Moses, his works unto the children of Israel," —to them, and to the heavy Germanic nations whom they have moulded ; not, apparently, to the children of Gomer and to Vercingetorix. But this opens a troubled prospect for the children of Gomer.

But perhaps we English, too, shall be as the children of Gomer ; for M. Renan has a theory that according to "that great law by which the primitive race of an invaded country always ends by getting the upper hand, England is becoming every day more Celtic and less Germanic ;" in the public opinion and policy of England for the last thirty years he sees the *esprit celtique, plus doux, plus sympathique, plus humain*. We imagine our Irish neighbours by no means share his opinion. A more truly Germanic, or, at least, Anglo-Saxon, performance than the abolition of the Irish Church through the power of the Dissenters' antipathy to church-establishments, then telling ourselves in our newspapers we had done it out of a pure love of reason and justice, and then calling solemnly upon the quick-witted Irish, who knew that the Dissenters would have let the Irish Church stand for ever sooner than give a shilling of its funds to the Catholics entitled to them, to believe our claptrap and be properly grateful to us at last, was never witnessed. What we call our Philistinism, to which M. Renan might perhaps apply his favourite epithets of *dur et rogue*, may well bring us into trouble ; but hardly, we think, our *doux esprit celtique*.

It seems, indeed, as if, in all that relates to character and conduct strictly so called, M. Renan, whom at other times we follow with so much sympathy, saw things with other eyes than ours. In a parallel between the English Revolution of 1688 and the French Revolution of 1830, he asks himself why the first succeeded and the second failed ; and he answers that it cannot have been owing to the difference between William of Orange and Louis-Philippe, because the

second had no faults as a ruler which the first did not show in fully as great a degree. When we read this, we are fairly lost in amazement. Surely the most important point in a ruler is *character*; and William III., whatever were his faults, had a character great and commanding; while Louis-Philippe had, or gave the world the impression of having, a character somewhat (to speak quite frankly) ignoble.

We would fain stop here in our enumeration of matters of difference; for to differ with M. Renan is far less natural to us than to agree with him. But it is impossible not to notice one or two assumptions respecting the French Revolution and the intellectual value of France to the world, because to these assumptions M. Renan, like almost all Frenchmen, seems to challenge the assent of mankind, at least of all mankind except France's *rogue et jaloux* enemy, Prussia. Greece and Judea, he says, have had to pay with the loss of their national existence the honour of having given lessons to all mankind; in like manner—

"France at this moment expiates her Revolution; she will perhaps one day reap its fruits in the grateful memory of emancipated nations."

Just in the same strain writes Mdme. Sand, in the *Letters* we have already quoted:

"Even though Germany should appear to conquer us, we shall remain the *peuple initiateur*, which receives a lesson and does not take one."

In prosperity the French are incorrigible, so that a time like the present offers the only opportunity for disabusing them of notions of this kind, so obstructive to improvement; and M. Renan, one would have hoped, was the very man to do it. Greece has given us art and science, Judea has given us the Bible; these are positive achievements. Whoever gives us a just and rational constitution of human society will also confer a great boon on us and effect a great work; but what has the French Revolution accomplished towards this? Nothing. It was an insurrection against the old routine, it furiously destroyed the medieval form of society; this it did, and this was well if anything had come of it; but into what that is new and fruitful has France proceeded to initiate us? A colourless, humdrum, and ill-poised life is a baneful thing, and men would fain change it; but our benefactor and initiator is the poet who brings us a new one, not the drunkard who gets rid of it by breaking the windows and bringing the house about his ears.

There seems to us a like exaggeration in the French estimate of their country's intellectual rank in the world. France is the *plat de sel*, the dish containing the salt without which all the other dishes of the world would be savourless; she is (we will use M. Renan's own words, for a translation might easily do injustice to them)—

"la grande maîtresse de l'investigation savante, l'ingénieuse, vive et prompte initiatrice du monde à toute fine et délicate pensée;"

she alone has—

"une société exquise, charmante et sérieuse à la fois, fine, tolérante, aimable, sachant tout sans avoir rien appris, devinant d'instinct le dernier résultat de toute philosophie."

We wonder if it ever occurs to these masters *du goût et du tact* that in an Englishman, an Italian, a German, this language provokes a smile. No one feels more than we do, and few Englishmen feel enough, the good of that amiability, even if it does not go very deep, of that sympathetic side in the French nature, which makes German and Protestant Alsace cling to defeated France, while, mainly for the want of it, prosperous England cannot attach Ireland. No one feels more than we do, few Englishmen feel enough, the good of that desire for lucidity, even apparent, in thought

and expression, which has made the French language. But, after all, a nation's intellectual place depends upon its having reached the very highest rank in the very highest lines of spiritual endeavour; this is what in the end makes its ideal; this is what fixes its scale of intellectual judgment, and what it counts by in the world. More than twenty years ago we said, lovers of France as we are, and abundant and brilliant as is her work of a lower order than the very highest:

"France, famed in all great arts, *in none supreme*"—

and this still seems to us to be the true criticism on her. M. Renan opposes living names, for or against which we will say nothing, to the best living names of Germany; but what is one generation? and what, directly we leave our own generation, are any names but the greatest? And where, throughout all her generations, has France a name like Goethe? where, still more, has she names like Sophocles and Plato, Dante and Raphael, Shakespeare and Newton? That is the real question for her, when she is esteeming herself the salt of the earth. Probably the incapacity for seriousness in the highest sense, for what the Greeks called *τὸ σπουδαῖον*, and Virgil calls *virtus verusque labor*, is here too what keeps France back from perfection. For the Greeks and Romans, and a truly Latin race like the Italians, have this seriousness intellectually, as the Hebrews and the Germanic races have it morally; and it may be remarked in passing that this distinction makes the conditions of the future for Latin Italy quite different from those for Celtic France. Only seriousness is constructive; Latin Gaul was a Roman construction, old France was, as M. Renan himself says, a Germanic construction; France has been since 1789 getting rid of all the plan, cramps, and stays of her original builders, and their edifice is in ruins; but is the Celt, by himself, constructive enough to rebuild?

We sincerely believe that France would do well, instead of proclaiming herself the salt of the earth, to ponder these things; and sometimes it is hard to refrain from saying so. M. Renan tempted us; yet we see with regret our space nearly gone. Why could we not have kept to our own generation? and then we might have given ourselves the pleasure of saying how high is M. Renan's place in it. Certainly, we find something of a bathos in his challenge to Germany to produce a living poet to surpass M. Hugo; but in sober seriousness we might challenge Germany, or any other country, to produce a living critic to surpass M. Renan. We have just been reading an American essayist, Mr. Higginson, who says that the United States are to evolve a type of literary talent superior to anything yet seen in the mother country; and this perhaps, when it is ready, will be something to surprise us. But taking things as they now are, where shall we find a living writer who so habitually as M. Renan moves among questions of the deepest interest, presents them so attractively, discusses them with so much feeling, insight, and felicity? Even as to the all-importance of *conduct*, which in his irritation against the "chaste Vandals" who have been overrunning France we have seen him a little disposed just now to underrate, he is far too wise a man not to be perfectly sound at bottom. *Le monde*, we find him saying in 1869, *ne tient debout que par un peu de vertu*. The faults and dangers both of vulgar democracy and of vulgar liberalism there is no one who has seen more clearly or described so well. The vulgar democrat's "happiness of the greatest number" he analyses into what it practically is—a principle *réduisant tout à contenter les volontés matérialistes des foules*, of that "popular mass, growing every day larger, which is destitute of any sort of religious ideal and can recognise no social principle beyond and above the desire of satisfying these materialistic cravings." The *esprit*

démocratique of this sort of democracy, avec sa violence, son ton absolu, sa simplicité décevante d'idées, ses soupçons méticieux, son ingratitudo, is admirably touched; but touched not less admirably is another very different social type, the cherished ideal of vulgar liberalism, the American type—

"fondé essentiellement sur la liberté et la propriété, sans priviléges de classes, sans institutions anciennes, sans histoire, sans société aristocratique, sans cœur, sans pouvoir brillant, sans universités sérieuses ni fortes institutions scientifiques. Ces sociétés manquent de distinction, de noblesse; elles ne sont guère d'œuvres originales en fait d'art et de science"—

but they can come to be very strong and to produce very good things, and that is enough for our Philistines. What can be better, and in the end more fruitful, than criticism of this force; but what constituency can accept a man guilty of making it? Let M. Renan continue to make it, and let him not fear but that in making it, in bringing thought into the world to oust claptrap, he fulfills a higher duty than by sketching paper constitutions, or by prosecuting electoral campaigns in the Seine-et-Marne. "The fashion of this world passeth away," wrote Goethe from Rome in 1787, "and I would fain occupy myself only with the eternal."

MATTHEW ARNOLD.

LITERARY NOTES.

A new poem by Mr. Robert Browning, of considerable length and importance, will shortly appear. It is in verse, and is modern both in subject and rendering. The relations between the sexes are discussed in a dialogue between husband and wife. She questions, he expounds.

Professor Klaus Groth, of Kiel, has been invited by the Curators of the Taylor Institution to give a course of lectures on German literature at Oxford. Following the precedent of M. Taine, who lectured last year in French, these lectures will be delivered in German. An account of Klaus Groth, and several of his Low-German poems with English translations, may be found in Max Müller's *Chips from a German Workshop*, vol. ii. p. 122-159. See also *Academy*, vol. ii. p. 348.

The *Augsburg Gazette* for February 1, 2, gives an interesting account of the intérieur of the venerable Austrian poet Grillparzer, who died on the 20th of January, and was buried four days later with great solemnity and a funeral oration by Heinrich Laube. Grillparzer, we are told, was watched over through life and tended in death by three domestic Graces; their names are Netti, Kathi, and Peppi Fröhlich, and the story of their connection with the poet is simple and very innocent. They were children when Franz Grillparzer got his first government appointment and wrote his first verses; their father was kind to the youth, and he gradually became almost a member of the Fröhlich household; he was generally expected to marry the eldest daughter when she was old enough, but whether it was that he wished to marry all three, or, as some say, that he preferred the second and did not like to disappoint the others, or perhaps that he thought his little idyll would lose its bloom in vulgar matrimony, years went on, and he did not propose. The three Graces gave lessons in music and languages, and the poet was not well able to meet the expenses of a household, but when in course of time Counsellor Fröhlich and his wife died, it seemed to all parties right and natural that Grillparzer should take up his abode with the orphans as their "Zimmerherr." All ideas of marriage were given up, and the middle sister, Kathi, remained his *liebe Braut* to the end; for the last twenty-two years of his life he called her so from habit and without disguise, and she inherits all his literary and other property; but this is a mere formality, for the sisters scarcely have a separate existence. Besides fugitive poems, of which Kathi is supposed to have treasured a considerable number, Grillparzer's unpublished works include essays on dramatic subjects, including the genius of Shakespeare; a

dramatic fragment, *Die Jüdin von Toledo*, which, from what the author said of it to Betty Paoli, is supposed to be of considerable extent. A complete work—*Libusa*—has been in Laube's hands many years, but it was confided to him with the injunction 'not to produce it on the stage unless he felt certain of its success, and he did not feel justified in "risking the tranquillity of the worthy old man, who was indifferent to fresh applause, but could still be annoyed by an unfavourable reception."

We would draw the attention of our musical readers to *The Old Cheque Book of the Chapel Royal from 1561 to 1744*, just edited by E. F. Rimbault for the Camden Society. It contains notices of very many English composers, their admissions, obits, &c. The old Chapel Royal, Whitehall, was burnt 1698, and Dr. Blow composed his anthem, "Lord, remember David," for the opening of the new one. The Chapel Royal, St. James's, was used much later. Henry Purcell lived in a suite of apartments in St. James's Palace, access to which was obtained by a winding staircase in the clock-tower. Dryden, when in debt, used to stay with him for weeks together in these apartments, where he was secure from his creditors. The book contains curious things wherever one dips into it.—The other Camden publication, the *Life of Bishop Bedell*, contains valuable information about the Irish rebellion, but has been already used by Burnet. The supplementary chapters give a good deal of additional matter.

The *Revue des deux Mondes* (February 1) contains an elaborate and not unsympathetic critique of "Le Docteur Strauss," by M. Victor Cherbuliez. He points out that the first *Leben Jesu*, written before Strauss was thirty, includes all that is really original in his contribution to theology, while his temperament was still too exclusively that of a theologian to allow his researches to take a wider range. His biographical works are commended for their literary merits, but treated as one-sided. When theologians begin to write politics, of course they are judged according to the skill they may display in their new rather than their original branch of study. In his *Friedliche Blätter*, Strauss descended to the ordinary newspaper level, and he is followed by his critic, but M. Cherbuliez at least is aware that it is a descent.

The President of the Geographical Society of Italy has written to the papers to say that the Conservator of the Bibliothèque Royale of Belgium has discovered a MS., in twelve chapters, containing the original autograph account of the discovery of Australia by Manuel Godinho, a Portuguese navigator who touched there in 1601, and whose priority to the Dutch sailors, who arrived three or four years later, has been unduly neglected. Mr. Ruelens vouches for the authenticity of the MS., which was brought to light at the Antwerp Exhibition, though it passed unnoticed in the crowd.

In *Fraser*, F. W. Palgrave speaks with authority on the growing force of the Mahommedan religious revival; and Professor Owen feels called on to protest in the name of science against a strange statement which has found its way into *The Speaker's Commentary*, and which reduces itself to the fact that Buffon and Haller were not prepared to risk the consequences of averring that Methuselah could not have lived 969 years. The professor analyses some cases of supposed longevity, and dwells on the nearly invariable proportion between the different phases of the organic existence of allied animals. But he is content to rest the issue on the teeth. A life of eight or nine centuries would wear out several sets of molars, and if Methuselah renewed his teeth like the elephant or the megatherium, he and his contemporaries were "zoologically distinct from the actual species of *Homo*." Stories of persons who have renewed their teeth for a third time in old age are plausibly accounted for by the case, which came under Professor Owen's observation, of an old Irish woman who related the same marvel of herself, where as the fact proved to be that a broken stump over which the gum had closed was beginning to be felt again as the jaw shrank with age.

Art and Archaeology.

THE EXHIBITION OF PICTURES BY OLD MASTERS.

I.—ITALIAN SCHOOLS.

ONE of the first things to take note of in regard to this year's Exhibition of Ancient Pictures at the Royal Academy is that the works by Italian masters are far less numerous than before, and, with a few brilliant exceptions, comparatively uninteresting. The managers of the exhibition, seemingly in order to make the greatest show with the least possible trouble, have, it is true, obtained a certain number of Italian pictures from Hampton Court, but they are all well-known works, which have been already times and often described; with one exception, therefore, I shall pass over these specimens.

The removal of national pictures to Burlington House from their accustomed places of deposit, where the public can at any time see them, is surely as superfluous as, on the other hand, the bringing together of treasures of art hidden away in country houses and private galleries is a real and appreciable public service.

The number of such works in this country often slumbering unnoticed for generations together is enormous, and there is no indisposition to lend them for the public benefit. All that is wanted is knowledge and taste to select the right pictures, and to ignore the dubious or bad ones. Of course this is very difficult and troublesome, but in commencing these exhibitions the Royal Academy ought to have been well aware of the arduous and responsible nature of the task. Now that the task has been undertaken, the public, to whom these gatherings are most acceptable, have a perfect right to require not only the mere annual continuance of the exhibitions, but such improvements in their general status as shall render them really worthy of the quasi-national institution itself. These remarks are prompted by the fact that the present exhibition displays a marked falling off in the scale and relative importance of the contributions, and also evidence of even less care in regard to the selection, arrangement, and illustration of the specimens than on the two former occasions. No little scandal and dissatisfaction have again been caused by the admission of spurious, doubtful, and inferior works. It ought to be well understood that the Royal Academy alone is to blame for this. Few private collections, it is true, are exempt from such a leaven, but in the interest of the contributors themselves the Academicians ought sternly to refuse such pictures if pressed upon them—they should clearly explain that, whilst both the "prestige" and the pecuniary value of authentic and really fine pictures will be greatly enhanced by their exhibition at Burlington House, spurious and doubtful contributions are just as certain to find their true level, to bring discredit on the judgment and taste of their owners, and, it may be, even to permanently lessen the value of any genuine and really important works with which they may be associated.

Enough has been said in the daily press (and it has been re-echoed in other countries) as to the incorrect and careless catalogues and the absence of any intelligible system of arrangement of these exhibitions. If next year the Royal Academy holds another exhibition of this kind, and these matters are not then radically amended, the serious question, wherefore, and on what grounds, a limited, exclusive, and self-appointed body of practising artists, banded together mainly for the sale of their own works, is entitled to the imposing status of the Royal Academy of Arts of England, will probably be raised by other voices than those of the timid members of their own profession.

The interest of the present gathering as regards the Italian schools centres almost exclusively in two pre-eminent names—Raphael and Titian. The one exquisite work of the former master, and four of the latter in truth alone call for special notice.

The "Little Madonna of the Orleans Gallery" (No. 95), contributed by H.R.H. the Duke d'Aumale, comes first in order.

This well-known and most precious work, executed on panel, about 11 inches high and 8 inches wide, was in all probability painted in the year 1506, when Raphael was in his 23rd year, and there are grounds for believing it to have been executed in his native city of Urbino. The picture is entirely by Raphael's own hand, and, moreover, it is one of the first productions in which

that hand is seen entirely emancipated from the conventional trammels of early association. There is here scarcely any trace of the early Umbrian school or of the specific manner of his master Perugino; it displays in fact an enormous onward stride in art, so remarkable indeed as to have greatly mystified one of the most eminent and industrious of modern art critics—Raphael's special devotee and historian, Passavant. The history of the picture, so far as regards its successive ownership for about two hundred years past, is sufficiently known. Towards the end of the seventeenth century it was in the possession of "Monseigneur," brother of Louis XIV.; at a later period it passed into the famous gallery of the Orleans family at the Palais Royal, during which time it was more than once engraved. When the Orleans collection was brought to London and dispersed in 1798, the picture was bought for 500/. by Mr. Hibbert, one of the notable amateurs of that day; it next appears in the hands of Messrs. Nieuwenhuys, the eminent picture dealers of London and Brussels, and shortly after 1835 it was sold by them to M. Benjamin Delessert of Paris for rather less than 1000/. The Delessert collection was in turn sold by auction in Paris three or four years ago, when the picture was purchased under the hammer by the Duke d'Aumale for something over 6000/. It is of course impossible to say exactly how much further the natural desire of the Duke to secure one of the old treasures of his family would have induced him to extend his biddings at the sale; it is known at all events that his commission was not an unlimited one; but the picture is literally of priceless value, and one thing is certain—that his opponent, the Director of our own National Gallery, should have secured it for this country *coute que coute*. At the time in question the National Gallery had ample funds to have purchased the picture up to any reasonable or indeed unreasonable amount. The nation had in fact shortly before acquired a less desirable work of Raphael at a much greater price; there is therefore no excuse for the lamentable want of judgment and energy manifested on this as on so many similar occasions.

I cannot do better than translate Passavant's description of the picture (*Raphael d'Urbino*, vol. i. p. 45, ed. Fr.), especially as it embodies the unlucky error to which I have already alluded. It is as follows:—

"The Virgin, turned to the right, almost in profile, is seated on a stool or form, and holds the Infant Jesus with her left hand, whom she contemplates with loving looks—the Child, raising himself towards her, takes hold of her vestments with his hands in order to aid himself: he is looking out of the picture with a serious expression. The background represents the wall of a chamber, with a reddish grey curtain on the left, and a shelf on which are placed some small vases. These latter accessories and the reddish grey curtain have certainly been added more recently: they are painted in the manner of David Teniers, so much so indeed as to give every support to the belief that he was actually the author of these unfortunate additions."

There is nothing to be said against the first part of the description; it clearly enough illustrates the composition—one of those simple representations of maternal affection so often pourtrayed with varying circumstances of detail by the great master—but the singular assertion that the accessories were added to the picture by David Teniers should be once for all rectified, and the more so as it has been recently repeated and endorsed in various notices of the present exhibition.

Not only is the picture in every portion entirely by the hand of Raphael, but the original workmanship, if it may be so termed, is so sound, the colours and vehicles used so pure and well applied, whilst at the same time the picture has always been so carefully preserved, that the surface has acquired a homogeneous so-called "patina" as transparent and to outward appearance almost as hard as a vitreous enamel. The painting must have arrived at that state long before the age of David Teniers, and any addition then executed on the surface, even by the most skilful hand, would be immediately visible to the eye of an expert. There is, however, no such appearance. The curtain and accessories are certainly of one and the same piece and texture with the rest.

I have elsewhere rectified similar errors of Passavant in regard to the works of Raphael—carefully and conscientiously, as I trust, and it will not be a waste of time to pursue the present matter further.

Passavant was an artist by profession, and with all his industry and devotion the practice of his profession did not allow him opportunity enough to acquire that wider range of knowledge and culture which are at the present day the character-

istics of the highest grade of connoisseurship. There are thus many indications which of necessity fell dead upon him for lack of adequate collateral study and observation—one of these indications in the present case alone is sufficient in itself to refute his theory. The little vases on the shelf, for instance, are not such vases as David Teniers would ever have painted, for the simple reason that they were of a kind he would never have been likely to see, still less to invent; they are, in fact, Italian majolica ware drug pots, "vasi di spezieria," just such as were manufactured in thousands for all manner of domestic uses in Raphael's own day at the head-quarters of that fabrication, his own native city of Urbino.

The oft-repeated sarcasm of the old Bolognese art-writer Malvasia, who, full of foolish local jealousy, taunted Raphael with being merely a "boccalaro urbinate," i.e. an Urbinese pottery painter, might indeed have received some shadow of justification if he had noticed the pots in this particular picture, and could have adduced them in evidence of Raphael's ceramic pursuits. If Passavant, however, had merely confined himself to noting the fact that the execution of these details betrays a marked bias towards the Flemish manner and technique, he would have been quite right; that bias does unquestionably exist, and it is an interesting and instructive peculiarity—but it is seen quite as strongly in every portion of the picture as in the details in question. I admit even that a certain fortuitous resemblance to the style and handling of David Teniers may perhaps be seen in this little work, executed more than a hundred years before he was born; the explanation of all this, however, is very simple; not only in this picture, but in several others still extant, painted by Raphael about the same time, the influence of the early Flemish painters is seen strongly marked and undeniable. For instance, in the exquisitely beautiful Holy Family with a lamb, at Madrid, this *soi-disant* "Teniers manner" is quite as much developed as in the picture now in question. But it may be objected that from the early Flemish painters of the fifteenth century to David Teniers there is a wonderful leap. So there is, but it is a curious fact that of all the great Netherlandish painters of the seventeenth century Teniers was perhaps the one whose crisp transparent execution and brilliant lightsome colour most strongly recalls the exquisite works of the Memlings and Roger Van der Weydens, whose technique and pictorial qualities he directly inherited. Unquestionably in these pictures of Raphael there is a sparkling vivacity of colour and a spirited lightsomeness and freedom of touch different from all that had been achieved before by his countrymen.

This fortuitous resemblance to the style of David Teniers, then, is a curious and interesting coincidence brought about by a well ascertained cause, which is this. It is known that the Dukes of Urbino were great admirers of early Flemish art—that they not only procured beautiful pictures by way of Venice from Bruges and Ghent, but that they had, even before Raphael's time, invited Flemish artists to Italy, and employed them at their court. There is indeed a chapter to be written on the influence of the early Flemish painters, and the introduction by them of the newly discovered processes of oil-painting into Central Italy—to all appearance next to Venice, Urbino was the principal centre from which the new art was rapidly propagated in Italy; we have proof positive that Raphael was an ardent student of the new style and processes. It is a fact that there are still extant certain works by an early Flemish painter, executed by order of Duke Federigo of Urbino about the time of Raphael's birth. These are certain large panel-pictures, heads or busts of ancient classical and mediaeval philosophers and men of letters; an entire series of these panels was in fact executed expressly to decorate the walls of the library in the palace at Urbino. Several of them were preserved in the Campana Collection, and are now in the Louvre. Now these panels were doubtless daily under Raphael's eyes when a youth, and a curious proof that they were so is the fact that one of his sketch-books, made when he was about eighteen or nineteen years old, and now preserved in the Academy at Venice, contains a most careful and beautiful series of drawings made from these very panels. It is all but certain that these works were executed by one Justus of Ghent, a scholar of Van Eyck, who resided at the court of Urbino. They are completely in the style of the latter great Flemish artist, and show no evidence of the slightest acquaintance with contemporary Italian art. There is nevertheless little doubt that they were actually executed in Urbino.

But this is not all—there also still exists at Urbino, in the sacristy of the cathedral, a large picture known to have been painted by the same Justus of Ghent, when he had become almost a naturalised Italian; and it, as might be expected, *does* show the influence of the art of the painter's adopted country—the latter work is in fact a hybrid production of the most curious kind, half Flemish, half Italian, in style—an oil picture drawn with much of the stiffness and archaism of the old Umbrian school, yet entirely Flemish in execution; the luminous depth and power of the old Flemish colouring and light and shade nevertheless being in great measure replaced by the clear lightsome fresco-like colour of the early Italians. Here then we have the very converse of the influence exerted on Raphael at a subsequent period.

The truth really is that Raphael, like all the greatest artists, was an ardent innovator—his art never stood still. He not only had the power of assimilating all previous and contemporary excellence, but even of anticipating in some degree developments which would necessarily result in after ages from the pregnant germs sown in his own time by others.

It is a fitting transition from the greatest masters of design to the paramount colourist of the modern art cycle. The four works of Titian now before us are all deserving of the closest study, and much more might be said about them than I shall have time or space to indicate at present.

The life of Titian completely overlapped, as it were, that of Raphael. Titian was born six years earlier, and outlived Raphael no less than fifty-six years (1483–1520 and 1577–1576). Raphael was cut off in the full maturity of his powers; whilst Titian may be said to have outlived himself. As might be expected, Titian's style, necessarily tinged and influenced by the surrounding associations of passing epochs, varied very greatly during the long period of his artistic activity. Thus his early works, contemporaneous with those of Bellini and Giorgione, those of his middle time, and again those of the later period of his life, when he stood alone amidst a generation of painters to whom the early associates and rivals of the man had become, as it were, "ancient masters," have really but little in common. Were it not indeed for certain glorious veins, which run through all the epochs alike—a pure "Titianesque" alloy giving the same splendid lustre to very different metal—the productions of the several periods might well be taken as the works of altogether different men.

The earliest in date amongst the present pictures is the portrait (said to be) of Alexander de' Medici, from Hampton Court (No. 72). This belongs to the first half of Titian's art career, but not, strictly speaking, to his early period. The "replica" of "La Gloria" (No. 114) and the "Europa" (No. 126), both painted about the same time, are of his later but still vigorous period, whilst the "Diana and Actaeon" (No. 73) is decidedly a senile work of the painter.

If the Hampton Court portrait were in its pristine state, or were it even tolerably well preserved, no finer specimen of Titian's powers as a portrait painter at his best time could perhaps have been shown; but, alas! the hand of the spoiler has been heavy on this treasure—not that of the inevitable spoiler-time—but the still heavier hand of stolid ignorance! and it must needs be said that the greatest blow has been inflicted quite recently by hands probably still busy at this ruthless work!

This magnificent picture has been always well known as one of the chief treasures of our royal collections. It belonged to Charles I., and was admirably engraved during his time by the able Flemish engraver Van Dalen. Though the personage represented greatly resembles Duke Alexander de' Medici, and although the costume and evident date of the picture (circa 1520–30) are in agreement with the attribution, there are reasons which it would be too long to recite why it can scarcely be the portrait of that personage.

I shall not describe this picture in detail—this has been done before, and it is at all times visible to the public—but I shall pass at once to the consideration of its present state and condition. This picture unfortunately, within the last five or six years, has been what is called "restored"—in reality, *greatly and irreparably injured!* As it happens, some years before this occurrence, it was for a lengthened period officially deposited in my keeping, and for months together it was daily and hourly before my eyes. During that time I repeatedly examined the

picture in the best possible light, and I am therefore in a condition to speak positively as to the transformation which it has recently undergone. It may as well be remarked that most of the pictures contributed to the present exhibition from Hampton Court are amongst those which have been "restored" under the present administration of the Gallery. If the object of exhibiting them at Burlington House was to challenge public opinion in regard to the cleaning and "restoring" operations which have been systematically carried on for a series of years, I cannot but say that I think that the course was a very unwise one, and that it would have been more prudent to have left the flayed and fresh-bedizened specimens in the quiet obscurity of the sombre apartments of the old palace.

Fortunately I am not alone in my reprobation of the cruel injury which has been inflicted on the picture now particularly in question, for an ably written letter appeared in the *Times* two or three years ago, pointing out the very facts to which I have now in turn to solicit attention.

The picture had doubtless in former years been greatly neglected and misused. There had been a large hole made through the canvas in the centre of the forehead of the figure, and which had been coarsely repaired and daubed over, seemingly by a common house painter perhaps more than a century ago. The picture was heavy and black in aspect mainly from the load of dirty varnish coarsely piled upon it in repeated coats from time to time. Nevertheless, through all this, the original lustre and perfection of Titian shone like the sun through murky clouds, and in spite of every drawback the picture was evidently fairly well preserved.

The head was relieved against a dark background evidently meant to represent empty space, *i.e.* that colourless atmosphere or medium, deep-toned, transparent, and impalpable, which Titian knew better than any other painter how to depict; but this dark background was not devoid of variety: it was, in fact, wonderfully toned and graduated so as to carry out and enhance the entire scheme of light and shade of the portrait. Titian's method of executing backgrounds such as this was by painting at first in solid impasted colours; the required depth, transparency, and variety of tint being afterwards gradually obtained by repeated glazing and scumbling with thin diluted pigments. Now this modern so-called "restorer," when he took the picture in hand, proceeded to effect what in the jargon of his profession is called "stripping" it, that is, he removed all the successive coats of varnish and the retouches which may have been applied at various periods, but he also in his carelessness and ignorance "stripped" off more or less completely along with these extraneous additions the superficial glazings, &c. which Titian himself had superimposed! The disastrous results can be more easily imagined than described—space will only allow me to specify one glaring evidence of the "stripping" process. The background of the picture, for instance, was entirely changed; the colourless transparent medium in which the head was, as it were, enveloped, and from which it emerged with amazing force and reality of effect, was replaced at once by a flat, hard, bluish-grey, empty surface, heavy and meaningless, signifying nothing but mere formless, textureless paint! So completely in fact has this picture been transformed that the background, which was dark, is now light, and the head is now detached in hard violent contrast, *dark upon light*, instead of *light upon dark*!

The unintelligent polluting touch of the "restorer" is visible more or less all over this once noble picture; finally the coarse repainting of the forehead of the figure, which a really skilful operator might easily have removed, is left just as it was, and is now indeed even rendered more obtrusively visible by the scouring process to which the rest of the surface has been subjected.

I purpose to notice the three remaining pictures of Titian in the next number of the *Academy*, and afterwards to give some jottings and memoranda on some of the principal Spanish, Flemish, and Dutch pictures in the exhibition.

J. C. ROBINSON.

EXHIBITION OF PICTURES IN WATER COLOURS, DUDLEY GALLERY, EGYPTIAN HALL.

THIS exhibition, which has for some years been distinguished by a general character of excellence, does not appear to us to

demand an extended notice this season. At first there were a number of rising men or painters who had not hitherto been seen in water colours; and these were joined by others who occasionally paint in that medium, whose oil pictures were well known. Besides, there have always appeared on the walls of the Dudley a great number of small landscapes distinguished by original observation and admirable sentiment. It is not necessary to mention names, representative of either of these categories, at least to those who have been interested in the exhibition. Gradually, however, the established painters have loosened their connection with the Gallery, or are now otherwise engaged; and the landscape element has this season taken a larger size and an inferior quality, some of the best artists of a year or two ago being insignificantly represented, or not at all. New exhibitors present themselves, but the committee of management treat them rather arbitrarily. Burne Jones, it is true, has been placed in the best position; and on hearing that he was an exhibitor, we went with the full intention of devoting ourselves to the study and elucidation of his works there expected. But, unhappily, the four emblematic figures in one frame, painted in tempera with some glutinous medium on cloth, called "The Triumph of Fortune, Fame, Oblivion, and Love," are too obviously imitative of old Italian work (the drawing that of Signorelli), both in manner and spirit, to be considered worthy of his transcendent powers. The only exhibitors of the original set fully represented are Simeon Solomon, whose several works here are all noteworthy, and informed with lovely and tender sentiment; and J. E. Poynter, who only sends two small portraits, painted with infinite care and refinement. But after the imaginative or historical pictures we have seen of these painters, it does not appear necessary to dwell on the present examples. A. B. Donaldson is here in great force, but also in a reproductive spirit, giving us a recollection of certain Venetian colourists; C. N. Hemy, also, imitating the modern imitations of earlier Flemish art.

It would seem as if all that now is left for the modern artist, in respect to the technique of his art, is to endeavour to do again what has been done before by the great masters. But he must use his art in obedience to other motives. Some pictures of modern times indicate this: one or two in France, "The Wreck of the Medusa," though a painful subject, perhaps De la Roche's "Hémicycle," in the École des Beaux-Arts; some in Munich, barring the colour; and in this country lovely inventions, answering "the desires of the heart," by D. G. Rossetti and E. Burne Jones, though both suffer from defective training. But such merely imitative work as these four emblems, by the latter, are nothing to the purpose.

W. B. SCOTT.

ART NOTES.

The administration of the city of Paris sees itself forced to reduce considerably the sums annually voted for fine art purposes. It will, however, continue the publication of the volumes containing documents relative to the history of the town. The Hôtel Carnavalet is destined to receive the new library and museum of the city.

The Vienna Museum for Art and Industry is now completed. For the moment the rooms are occupied by an exhibition of specimens of modern Austrian work, but as soon as this exhibition closes, the collections which have been provisionally housed in the old Ball-house, will be transferred to their permanent home. An intelligible description of the building, accompanied by excellent plans, will be found in the *Zeitschrift für bildende Kunst* for Jan. 12.

The Albert Memorial in Hyde Park will soon be completed. Two of the corner groups are already up, and the remaining two are in course of erection. The "Asia," by Mr. Foley, promises well, the single figure yet in place is full of fine character and dignity. In about a fortnight, the frieze round the base of the Memorial itself will be uncovered, and can then be appreciated with greater justice; for at present the shed which encloses it shuts out the daylight for which the work is calculated. The portions by Mr. Armistead, "Music and Painting," are remark-

able for sound thought and work. The treatment is skilful and picturesque ; some of the figures show fine lines, and the impression, as a whole, is complete. One point will be likely to challenge criticism. Mr. Armistead has boldly attempted the feat of turning the back of one of the figures to the spectator. This seems a little doubtful. Figures may appear to come forth to the air, from the solid block, but the moment we reverse the process, knowledge of the impassable wall checks the imagination, the actual limit of space is felt, and in consequence, we seem to see half a man balancing on a ledge. But light and shade do so much magic, that perhaps the removal of the shed may help this figure by throwing it into strong relief. Details in the work of the canopy deserve attention. Many portions, both in bronze and mosaic, are attractive and artistic in conception. If, however, we turn from considering separate portions to take a view of the whole, we feel that we cannot yet congratulate ourselves on having escaped the fates which attend on all our public works. Two radical defects seem in part to cause the whole shortcoming. First, the unsuitability of the base to the memorial itself. The base, the steep ascending flight of steps, is too considerable for the slight thing which surmounts the whole. Second, the site does not harmonize with the character of the monument. The lines of the canopy seem imperatively to demand an architectural background. As it is, the Memorial does not look as if it belonged to its place. Is it possible, that did it stand in a marble-paved court, on a comparatively low platform, ascended by broad and shallow steps, closed in by narrowing walls, against which every line would be boldly accentuated, rising into light from the deep cast shadows of its surroundings, is it possible that so, we might have looked on it with pleasure ?

The chief feature of the *Gazette des Beaux-Arts* for February, is a reproduction of a fine pen-and-ink sketch ascribed to Mantegna, and existing in the collection of M. Emile Galichon. The subject is "Tritons restraining sea-horses," and the drawing is supposed to have been a portion of a composition representing a triumphal procession of Neptune. The letterpress does not give a scientific account of the drawing, but it seems once to have been in Ottley's hands. M. Lecoy de la Marche has resumed the publication of the correspondence of directors of the French Academy at Rome. Some letters of Natoire, printed in the present number, are an interesting contribution to the art history of the eighteenth century. The publication of the documents relative to the arts during the Commune is also continued by M. Alfred Darcel.

The "Madonna with the Veil" by Titian was generally believed to have perished in the sack of Rome by the Constable of Bourbon. It is now reported to have been discovered amongst the pictures in an old chateau belonging to the late Dr. Riteri. The professors of the Academy of Turin pronounce it to be the genuine picture.

Lady Walmsley, of Hume Towers, Bournemouth, is about to present to the nation the portrait gallery belonging to the late Sir Joshua Walmsley. The collection comprises a portrait of Cromwell by Lucy, portraits of Nelson, Garibaldi, George Stephenson, Hume, Cobden, Bright, Disraeli, and Gladstone.

The dangers run by the glass-paintings of the Paris churches during the two sieges suggested to the Municipal Council the idea of making a complete collection of the cartoons originally employed in their execution. When the original designs cannot be procured, careful tracings are to be made on the glass itself. M. Prosper Lafaye, the author of the remarkable restorations of Saint-Séverin, is the artist entrusted with the realization of the project.

A quantity of Palissy ware is reported to have been discovered on the estate of the Count de la Grandpré, in the neighbourhood of Apremont. Two peasants whilst ploughing laid bare the mouth of a cave about fifty centimetres below the surface ; the count arrived on the spot, and directed excavations to be made, the result of which was that in an obscure corner a quantity of

vieilles poteries émaillées were found. The work of excavation is to be continued.

At the instance of M. Gallait, the Belgian Academy of Fine Arts proposed to the government the erection of a building specially devoted to artistic exhibitions. The request has been complied with, and a hall is to be built on some waste lands near the Rue de la Régence, which is to serve at the same time the interests of painting, sculpture, and music.

The collections of the late M. de Villetteux will be sold in two parts. His faience, porcelain, glass, and tapestry, will come to the hammer at the Hôtel Drouot, but his pictures, as well as the paintings of the fourteenth, fifteenth, and sixteenth centuries, and objets d'art, from the collection of the Count de Nahuys, will be put up to auction next week at Brussels.

The catalogue for the sale of the collection of M. Michel de Treaigne is just out. It is illustrated with nineteen fine etchings. The price is ten francs.

Anton Hess has just completed the four colossal figures commissioned for the Rathhaus of Munich. They personify *Gewerbfleiss*, *Häuslichkeit*, *Bürgermuth*, and *Wohlthätigkeit*. The building of the Rathhaus itself is nearly finished, and the figures will be immediately placed in their distinct niches.

The *Nürnberger Korrespondenz* gives a short biography of Dr. Heinrich Schliemann, whose touching enthusiasm for a particular theory of Trojan topography takes the practical form of excavations, which we have noticed from time to time. He was the son of a small shopkeeper, went to sea, was wrecked, and took a clerkship in an Amsterdam house of business. Half his salary (800 francs) was spent in learning languages, which he mastered at the rate of six weeks a piece. In 1846 he went to Russia, and gradually grew rich ; and in 1856 allowed himself the pleasure of learning Greek (ancient and modern) in three months : he had been afraid before, lest the interest of the pursuit should be so absorbing as to interfere with his business engagements, from which he withdrew in 1863 to spend a well-earned fortune in travel and the indulgence of his archaeological tastes.

In the *Allgemeine Zeitung* (January 30) Dr. Lübbe notices some recent publications of the Austrian Museum of Art and Industry, and contrasts the neglect of all art-interests displayed by Prussia, and especially in Berlin, ever since the death of Kugler in 1857. His complaints receive additional point from the fact that the new gold coinage of the empire has been so badly struck that it will have to be called in.

Competent connoisseurs consider the supposed Jamnitzer cup, recently acquired for the South Kensington Museum, to be of doubtful genuineness.

The *Uhland-Denkmal* is now somewhat advanced. The statue modelled by Kiez of Dresden has been cast by Pelargus at Stuttgart, and is already half finished as to the chiselling. But in consequence of Kiez being behindhand with a portion of the relief, there is no chance of the statue being in position before the end of this year. The architectonic part of the work will be carried out by Nicolai of Dresden and Koch of Tübingen.

Madame Moscheles, the widow of the eminent composer, is at present engaged in writing the life of her husband. The work is to appear, if possible, simultaneously in English and German.

The large number of various classes of drawings representing the practice of William Hunt, both in his early and later time, collected by his friend and medical adviser, Mr. Wade, of 68, Dean Street, have been and are now visible by admission cards (from 12th to 17th current) previous to dispersion. The collection is unique—as it is not likely any other either so extensive or so good exists—and is certainly very interesting, as showing the

water-colour art of the last generation from the hand of one of its greatest proficients.

Mr. Wood, to whom we alluded briefly in our last number (p. 46), has obtained authority from the Sultan to make extensive excavations at Ephesus, in order to bring fully to view the remains of the famous temple of Diana, burnt by Erostratus. The site has been discovered already, the pavement of the *cella* has been laid bare, together with several magnificent architectural fragments.

In the *Beilage* of the *Allgemeine Zeitung* for January 9, Dr. Alfred Woltmann gives an account of the rearrangement, &c. of the gallery of paintings at Carlsruhe. This gallery contains many works of value, many old German pictures, some Italian, a large collection of eighteenth-century French, amongst which are some valuable Chardin, and a good deal of modern German painting. All this was in the most miserable state of neglect and confusion; now order and reform have passed everywhere except into the catalogue, which corresponded in ignorant carelessness with the previous state of the pictures. Dr. Woltmann mentions, by way of example, that a Madonna of La Hire is ascribed to Poussin, who, it is stated, was born 1505—died 1565. Thus a painting of a century *later* than Poussin is first given to him, and then the period of his activity is *antedated* by a century.

The regulations for the coming Salon have been much debated in Paris. A sentiment has been gaining ground amongst artists in favour of establishing complete independence of the government. The present programme, founded on the report addressed by M. Charles Blanc, the Director des Beaux-Arts, to the Minister of Public Instruction must be considered only as a temporary compromise. Though for the moment no practical result has been achieved, the day is not far distant when juries, medals, &c.—all, in short, that does or is supposed to symbolize protection in art—will be swept away. M. Louvrier de Lajolais remarks in the *Chronique des Arts* for December 24, 1871: “La seule protection que l'Etat doive aux artistes, c'est celle à l'aide de laquelle ces derniers parviendront à se constituer indépendants de lui.”

M. Jules Labarte, who is well known by his works on the arts of the middle ages and the renaissance, has just been named *membre libre* of the Académie des Inscriptions et Belles-Lettres.

Selected Articles.

Die neuen Ausgrabungen in Pompeji und Herculaneum. Von R. Engelmann. Mit Grundrissen. Zeitschrift für bildende Kunst, Feb. 9.

Die Darstellung des Abendmahls durch die byzantinische Kunst. Von Dr. Ed. Dobbert. Jahrbücher für Kunsthissenschaft, Dec. 31, 1871.

New Publications.

BECQ DE FOQUIÈRES, L. Aspasie de Milet. Étude historique et morale. Paris: Didier.

BURTON, Capt. R. F. Zanzibar; City, Island, and Coast. 2 vols. Tinsley.

CHÉNIER, André. Poésies de. Édition critique, par L. Becq de Fouquières. 2^e éd. revue et corrigée. Paris: Charpentier.

CHERBULIZZ, V. La Revanche de Joseph Noviel. Berlin: Asher.

DOBBERT, E. Die Darstellung d. Abendmahls durch die byzantinische Kunst. Leipzig: Seemann.

ERCKMANN-CHATRIAN. Histoire du Plébiscite racontée par un des 7,500,000 oui. Paris: Hetzel.

GRAESSE, J. G. Th. Guide de l'amateur de porcelaines et de poteries. 3^e éd. Dresden: Schönfeld.

HEYDEMANN, H. Humoristische Vasenbilder aus Unteritalien. Berlin: Besser'sche B.

LEFARTH, J. A. Lambert v. Hersfeld. Ein Beitrag zu seiner Kritik. Göttingen: Vandenhoeck u Ruprecht.

LEGOUVÉ, E. Conférences parisiennes. Paris: Hetzel.

LENZ, VON. Die grossen Pianofortevirtuosen unserer Zeit aus persönlicher Bekanntschaft. Liszt, Chopin, Tausig, Henselt. Berlin: Behr.

LIPPmann, F. Eine Studie üb. chinesische Emailvasen. (Museum Reprint.) Wien: Rosner.

MICHELANGELO BUONARROTTI, Le Rime di. Nachdichtungen von Hans Grasberger. (Complete collection.) Bremen: Kühtmann.

MÜNCH, A. Die Münzsammlung d. Kantons Aargau. Aarau: Sauerländer.

NOTTEBOHM, G. Beethoveniana. Aufsätze u. Mittheilungen. Leipzig: Rieter-Biedermann.

RIMBAULT, E. F. The Old Cheque Book, or Book of Remembrance, of the Chapel Royal from 1561 to 1744. (Camden Soc.)

SAJID BATTHAL, Die Fahrten des. Ein alttürkischer Volks- u. Sittenroman. Uebersetzt von Dr. Ethé. 2 Bde. Leipzig: Brockhaus.

WESTPHAL, R. Elemente d. musikalischen Rhythmus, m. besond. Rücksicht auf unsere Opernmusik. Jena: Costenoble.

Physical Science and Philosophy.

Primitive Culture: Researches into the Development of Mythology, Philosophy, Religion, Art, and Custom. By Edward B. Tylor, author of Researches into the Early History of Mankind, &c. 2 vols. Murray, 1871.

It is perhaps inevitable that in the present chaotic state of our knowledge of man's mental nature and its relation to his visible organism, a work like the present should be unsatisfactory. The minute anatomy of the brain has been long ago exhaustively investigated, while the comparative study of its form and size in different races and individuals has been carried on by means of extensive collections of crania and casts; yet, although the brain is almost universally admitted to be the organ of the mind, by neither of these lines of research nor by any combination of them, have any definite conclusions been arrived at as to the relation of the brain to the various mental faculties. Up to the present day our physiologists dispute as to whether the forehead or the occiput is the seat of the intellect, yet they scout the idea of giving up their hitherto barren line of investigation, in favour of that experimental method of comparing function with development which, the much-abused phrenologists maintain, leads to complete success. Equally unsatisfactory is the practice of leaving out of view, in theories of mental development, the numerous well-established cases of abnormal mental phenomena which indicate latent powers in man beyond those usually recognised. These are looked upon as obscure diseases of the nervous system, and although their occurrence is very rare to individual experience, the records of them are now sufficiently voluminous to furnish comparable cases to almost all that occur. They can thus be grouped into classes, and this fact, of each one forming an item in a group of analogous cases, is supposed to preclude the necessity of any attempt at a rational explanation of them. This is the method very largely adopted by Mr. Tylor, who in treating of the beliefs, customs, or superstitions of mankind, seems often to be quite satisfied that he has done all that is required when he has shown that a similar or identical belief or custom exists elsewhere.

In these volumes he has presented us with an enormous mass of facts of a very miscellaneous character, and he apologizes for this by the necessity of establishing a firm foundation for so important and novel an enquiry as that which he has undertaken. But the point and bearing of a large number of these facts is not always clear, and his book would have been both more readable and more instructive if typical facts only had been given, and if the propositions sought to be established had been laid down with more precision. In noticing a work so full of detail, it is only possible here to allude to a few of the more striking and characteristic features, as, owing to the author's somewhat involved and prolix style, no extracts of reasonable length could give any idea of the way in which the various branches of the subject are treated.

One of the most important results of Mr. Tylor's researches, and that which is most clearly brought out in every part of his work, is, that for the purpose of investigating the development of man's mental nature race may be left out of the question, and all mankind treated as essentially one. If we accept this as the result of a long and, as far as this particular question is concerned, almost exhaustive study, it forms a powerful argument against the polygenetic school of anthropology; for had the several races of man been derived from several distinct animal forms, or in any other independent way, it is hardly possible to conceive that no fundamental differences whatever should be exhibited in the nature and quality of their mental faculties. Another important question treated very fully is that of development and progress, which are held to be fully established, degeneration being rare and exceptional; and the passage in Sir Charles Lyell's *Antiquity of Man*, in which he sarcastically maintains that if man has degenerated we ought to find, instead of rude implements of flint and bone, lines of buried railroads and electric telegraphs, with astronomical instruments and microscopes better than any we possess, is quoted with approval. But surely this passage is illogical; for man might slowly degenerate in mind while still progressing in arts, and even in science, because these are necessarily growths, and the adapter and improver may have less genius than the inventor who went before him. Mr. Galton has carefully discussed one phase of this question in his *Hereditary Genius*, and gives good reasons for believing that the average Greek of antiquity was higher mentally than the average European of to-day; and the fact that the Greeks had neither microscopes nor even the printing machine has really no bearing whatever on the question. The conception that the human race, as a whole, was higher morally and intellectually ten thousand years ago than it is now, is not disproved by evidence of any amount of inferiority in the arts, which of course is overwhelming. Yet even on this point the facts and arguments of Professor Piazzi Smyth should have been noticed; for he shows that what is admitted to be one of the most ancient buildings on the earth is so perfect both in design and execution, as to demonstrate that its constructors must not only have equalled our modern engineers in mental capacity, but must have possessed instruments capable of determining angles, levels, and distances, with as much precision as any we now possess.

Children's games, nursery poems, proverbs and riddles, are all adduced to show the close mental resemblance between remote ages and widely separated races; but the illustrations of this principle are sometimes far-fetched and improbable, as when the saying, that a frightened person was "ready to jump out of his skin" is connected with the belief in were-wolves—men who had the power for a time of getting out of their own skin to become wolves.

Mythology and nature-myths are next treated at great length, but with little novelty or useful result. The chapters on language are however very good. They treat especially of radical and universal similarities; so that even here Mr. Tylor is enabled to ignore race and all special linguistic affinities, and to show that there is a substratum common to all human language. The words or sounds expressing affirmative and negative, dislike, silence, near and far, and many others, are shown to resemble each other all over the world, and to be founded on interjectional sounds which express similar ideas to all mankind. The mode of counting among various nations furnishes similar fundamental resemblances. These subjects are very fully treated, and afford a solid foundation for the developmental theory of the origin of language.

More than half the work is occupied with the subject of

"Animism" or the doctrine of souls. We are overwhelmed with elaborate details of the endlessly varied ideas and beliefs of men as to the soul, spirits, and gods. We are constantly told that each such belief or idea "finds its place," with the implication that it is thus sufficiently accounted for. But this capacity of being classified necessarily arises from the immense variety of such beliefs and from the fact that they are founded on natural phenomena common to all races, while the faculties by which these phenomena are interpreted are essentially the same in every case. Any great mass of facts or phenomena whatever can be classified, but the classification does not necessarily add anything to our knowledge of the causes which produced the facts or phenomena. We find at times great looseness of statement when Mr. Tylor attempts to account off-hand for superstitions. He tells us, for example, that when the devil with horns and hoofs and a tail had once become a fixed image in the popular mind, "of course men saw him in this conventional shape." Now this general statement is simply not true. In the records of witchcraft-trials it will be found that witches generally described the devil as "a man"—"a dark man"—"a black man"—"a gentleman in black clothes"—"a gentleman richly dressed," and seldom, if ever, as appearing in the full conventional form. The theory of expectant attention determining the form taken by a delusion does not cover these facts, and this is even more strikingly shown by another discordance of a similar nature. It is certainly a popular belief that the devil is hot, and that his touch burns. Yet the witches, whether in Scotland, England, or France, almost invariably describe him as cold to the touch; and this statement, so often made by persons who could have had no knowledge of what others had said, curiously agrees with the phenomenon described by modern spiritualists, of a cold wind passing over the hands during a *stance*. Such a correspondence of testimony in a direction exactly opposed to popular belief points to some substratum of unrecognised facts even in witchcraft, and it is not satisfactory to find the nature of this testimony misstated to make it fit in with a foregone conclusion. A recognition of the now well-established phenomena of mesmerism would have enabled Mr Tylor to give a far more rational explanation of were-wolves and analogous beliefs than that which he offers us. Were-wolves were probably men who had exceptional power of acting upon certain sensitive individuals, and could make them, when so acted upon, believe they saw what the mesmeriser pleased; and who used this power for bad purposes. This will explain most of the alleged facts without resorting to the short and easy method of rejecting them as the results of mere morbid imagination and gross credulity. Again, we are told that "the ghost or phantasm seen by the dreamer or visionary is like a shadow, and thus the familiar term of the *shade* comes in to express the soul." But the dreamer sees what appear real substantial bodies, not shadows or images; and it is only the waking seer who, by seeing other objects through the phantasms or by testing their unsubstantiality by means of touch, can arrive at the conclusion that they are of a spiritual or shadowy nature. So, the general belief in the ghost of a man being seen in or near the house where he lived, is not at all accounted for by dreams, which are bound by no limits of locality, and generally show persons in the most incongruous places. Accounts of the other world seen in visions are said to be "just what the seer has been taught to expect"; but at p. 47, vol. ii. the seer is surprised to find the trees, shrubs, and paths such as she had been used to on earth. It was not therefore what she had been "taught to expect"; and the remark becomes both valueless and misleading, instead of helping us to understand how such visions originate.

Although the details given on these subjects are so numerous and so heterogeneous as to be wearisome in the last degree, they are yet altogether one-sided. They have been amassed with one object and selected, no doubt unconsciously, so as to harmonize with the *a priori* convictions of the writer. All narratives tending to prove that anything which goes under the général term supernatural really exists as fact, are either entirely omitted or just mentioned in such a manner as to imply that they are necessarily impostures or delusions, and therefore unworthy of discussion. There is, however, on record a mass of facts or alleged facts ranging through every period of history down to the present day, and going to prove that the so-called supernatural is not all delusion, and that many of the beliefs of all ages classed as superstitions, have at least a substratum of reality. In the works of Dr. Kerner, Ennemoser, Görres, and Dale Owen, and in Mr. Howitt's *History of the Supernatural*, are collections of these facts which, although by no means exhaustive, are yet far more extensive than those Mr. Tylor has cited to support his argument; while many of them are so thoroughly well established that they cannot be explained away. It is therefore at least a possible solution of the problem of animism, that the uniformity of belief is due in great part to the uniformity of the underlying facts; and a work on the development of religion and mythology should fairly grapple with the question, "How much of truth is at the bottom of the so-called superstitious beliefs of mankind?" But our author avoids all such inconvenient enquiries by means of his infallible nostrum. A fact or a belief occurring once only might require explanation, but if a second or an analogous fact or belief can be found elsewhere, the whole thing becomes clear. "Second sight," for instance, occurs among savages as well as in Scotland. Nothing more is required, according to Mr. Tylor, to prove that it has no existence at all, except as a mere "belief." Those curious phenomena which have been recently investigated by Mr. Crookes and other Fellows of the Royal Society, and which are declared to be realities by members of the French Institute, by American judges and senators, and by many medical and scientific men in this country, are treated in exactly the same way. Something closely related to them is recorded by classical writers, and occurs now among savage tribes. It is therefore clearly a case of "survival of old beliefs," and no further notice need be taken of it. Mr. Tylor even goes so far as to say that for his purpose it really matters little whether they are true or not. In order to arrive at true results as to the origin, nature, and development of men's beliefs, it matters not whether their foundation is fact or imagination! This belief of Mr. Tylor seems to the present writer as completely an hallucination as any to be found recorded in his volumes.

It is pertinent to recall the fact that even matters of pure science, when they have run strongly counter to popular opinion, have been treated just as Mr. Tylor treats superstitions. Less than twenty years ago the evidence for the antiquity of man was in this category. It was then ignored or sneered at as beneath discussion. It was treated just as if it were an "epidemic delusion;" yet every iota of it turned out to be fact, and fact of the highest importance and of surpassing scientific and human interest. This was a purely scientific question, but there is another which had all the aspect and characteristics of a superstitious delusion, and was yet a truth. About twenty-eight years ago the phenomena of insensibility to pain in the mesmeric trance attracted attention. Experiments of this kind were often exhibited in public, and most painful surgical operations were performed on subjects who manifested no indications of feeling. The present writer well remembers the

universal shout of indignation at these experiments. They were declared to be gross imposture or delusion from beginning to end. The apparent unconsciousness was all sham, and the medical men who performed the operations, and gave a detailed account of them, were accused of being parties to the imposture, and even of having bribed the patients. It took many years to establish this fact, of insensibility to the most excessive stimuli and the most intense pain produced without the use of any drug or any violence; but it was established. It remains, however, a fact of which modern science can give no intelligible account, and which it therefore ignores as much as possible.

These examples (and many others might be adduced) should teach us, that it is unsafe to deny facts which have been vouched for by men of reputation after careful enquiry, merely because they are opposed to our prepossessions. A work like the present, one-sided though it be, furnishes much evidence to support the views of those who maintain that a considerable portion of the so-called superstitions of mankind repose upon facts; that these facts have been almost always misunderstood and misinterpreted in past ages, as they are now by the ignorant and among savages; and that, until they are recognised as possible realities, and studied with thoroughness and devotion and a complete freedom from foregone conclusions, it is hopeless to expect a sound philosophy of religion or any true insight into the mysterious depths of our spiritual nature.

ALFRED R. WALLACE.

ARCTIC EXPLORATION.

LIEUTENANT WEYPRECHT'S report of the Austrian Polar Expedition of last year was read before the Academy of Sciences at Vienna on the 7th of December last.

After showing how the ocean streams in the Arctic basin must maintain a delicate balance between the amount of ice produced and the quantity carried out southward to be restored again to a liquid state, so that a certain definite average is never exceeded; and how the outgoing cold current of necessity requires a complementary equatorial flow, the author proceeded to examine this circulation, aided by observations made during the voyage.

Lieutenant Weyprecht claims for the depth-temperatures recorded by this expedition that they are the first trustworthy observations made in these regions, and that they throw new light on the final track of the Gulf Stream.

The entire sea between North Cape, Bear Island, and Novaia Zemlia, was found to contain comparatively warm water, which moved to northward as summer advanced, giving up its warmth by contact with the ice, and carrying the ice edge before it. The depth-temperatures show that the warmer water formed a strongly marked upper stratum, which decreased in temperature and thickness as it was traced to north-eastward. In the meridian of 44° E. in 72° N. the surface temperature was 40°.5 F., and in 77° N. in the same longitude it had fallen to 36° F.; at the former point the temperature of 32° was reached at a depth of 420 feet, at the latter in 65 feet. Everywhere at a depth of 800 feet an almost uniform temperature of 29°.5 was found.*

In 60° E., near the north coast of Novaia Zemlia, the warmer stratum was found by the expedition to have decreased in thickness to 30 feet, so that its limit had nearly been reached. Judging from this, Lieutenant Weyprecht raises the question whether the open water, with a surface temperature of 44°, navigated last year beyond Novaia Zemlia to 81° E. by Captain Mack, can be due to the influence of this warm stratum alone. In explanation of it he advances the theory that the great Siberian rivers, flowing in part through steppe-lands which in summer have an almost tropical climate, pour such a quantity of fresh and warmed water into the shallow Siberian sea as to account for its observed freedom from ice. One of the smaller streams in the Taimyr peninsula was found by Middendorf to have an average temperature in August of 52°.

* Former observations with unprotected thermometers in these regions appeared to show an increase of temperature from the surface downwards.

Some light is thrown upon the further progress of this warmer water by the presence in July at the highest latitudes reached by the expedition of great quantities of drift pine-wood, which must have come from the Siberian rivers, and by the appearance in August of a large quantity of fresh-water ice to the south of Gillis Land. Lieutenant Weyprecht believes that a portion of the warmer water from these rivers unites with the furthest branches of the Gulf Stream to cause the open water so unexpectedly found last year between Novaia Zemlia and Spitzbergen, and that the great distances which these sources of heat have to traverse before reaching this area explains the fact of its being free of ice at such a late period of the year as September.

The whole of these observations, Lieutenant Weyprecht considers, clearly indicate the importance of the seas north and east of Novaia Zemlia for the object of Polar research, and he strongly recommends two lines of exploration: one, to northward from the highest latitudes, between 40° and 50° E., reached in the trial voyage, where, during three months' cruising, no ice which could be termed "pack" was seen; the other, to eastward through the unknown waters to the north of Siberia, making for Behring Strait and an American harbour.

Scientific Notes.

Geography.

Geographical Distribution of Coniferae.—Dr. Robert Brown has communicated to *Petermann's Mittheilungen* an important paper on the geographical distribution of Coniferae and Gnetaceæ. Separating the regions which contain a number of species, the greater part of which are peculiar to these areas, he distinguishes twenty-six "provinces" of distribution over the globe. Each of these, with its characteristic species, is described in detail in the paper. Among the conclusions drawn by Dr. Brown are the following:—That the Coniferae are found over the whole globe, preferring, however, the colder regions; when a northerly species spreads southward beyond the region in which it has attained its greatest development, it climbs to a height which has a mean temperature similar to that of its original locality. Every species expands in the direction of least meteorological and physical change, and has probably its own limiting isotherms, though temperature is not by any means so important a condition as moisture. Every species has a region within which it attains the climax of development, and beyond this it decreases in numbers of individuals as well as in strength. Every natural genus appears to have originated in the centre of the area within which the greatest number of its species are found; it can scarcely be doubted, however, that these centres of origin have been subjected to great geological changes, and thus many of the apparent irregularities in the distribution of plants may be accounted for. It is erroneous to maintain that in every case climate and elevation exert an influence upon the distribution of plants and animals; the geological constitution of a region has an appreciable power in limiting the expansion of species.

West Africa.—Another paper in the same journal, accompanied by a map, gives a complete history of the attempts which have been made to penetrate West Africa in the neighbourhood of the delta of the Ogowai river, along with a summary of our knowledge of that part of the continent. The Ogowai must be one of the main arteries of the country, but nothing whatever is yet known of its course beyond a distance of 150 miles inland from its great delta, the outmost branches of which are more than 50 miles apart on the coast. In recent years attention was drawn to the magnitude of this river, first reported by Bowdich in 1817, by Du Chaillu's journeys in the coast regions north of the Gaboon and south of the Ogowai, in the years 1856–59. The French, who have long had settlements in its neighbourhood, have at various times made efforts to navigate its waters, as yet without much success, though there do not appear to be any great barriers in the way of a determined explorer. Their first trial in 1862, under Lieut. Serval in the steamer *Pionnier*, was made in July, the season when the river is lowest,* and soon the journey had to be continued in boats, but at a distance by river of about 100 miles from the coast, on the rumour of an attack by the natives, further progress was abandoned. Neglecting the experience of the former attempt, a second, under Lieut. Albigot and Dr. Touchard, also in the *Pionnier*, was undertaken at the same season in 1864, but, waiting till October, the expedition reached the mouth of a large tributary from the southward, named the Ngunié, at a distance of about 50 miles beyond the turning point of the first trial. A third voyage in 1867 under Lieut. Aymes did not reach farther than this confluence, beyond which the main river is named the Okanda. Overland from

the Gaboon in 1864, Lieut. Genoyer, after an ascent of the coast range named by the Portuguese the Serra do Crystal, reached the Okanda above the confluence of the Ngunié, and returned to the Gaboon by one of the tributary streams of that estuary. Retraversing the country south of the Ogowai visited by him in 1858, Du Chaillu came upon and traced the Ngunié down towards the Ogowai for a considerable distance in 1864, previous to his longest journey inland to Ashango. In 1866 a journey was made by an Englishman named Walker from the Gaboon to the Ogowai, during which he followed up the tributary Ngunié to the point at which Du Chaillu had turned, and afterwards navigated the Okanda by boat in its course from north-east to a point 50 miles above the confluence, the farthest yet reached by any European. Here in July, the time of lowest water, at a distance of more than 200 miles by river from the coast, the first hindrance in the form of rapids was encountered. The river breaks into several channels of from 100 to 300 yards in width, and has a very tortuous course. From one of the rock-islands in the river, the smoking mountain of Otombi can be seen to the north-east, and, according to native report, there is a second volcano, named Onshiko, beyond this one in the same direction. The existence of a great lake far in the interior was confirmed to the traveller by every report, but whether this forms the source of the Okanda could not be ascertained. More recent excursions by the French have completed a rough survey of the region of the delta. The Ogowai is the gate through which our knowledge of Central West Africa must be obtained.

Dr. Schweinfurth.—The African traveller and botanist Dr. Schweinfurth has happily returned in safety to Europe, and though he has suffered the loss of the greater part of his invaluable collections and drawings, he has brought back a harvest of information and experience which places his journey among the most successful of modern times. After his great journey west of the Upper Nile, in the country of the Niam-Niam and Monbuttu (see *Academy*, vol. ii. p. 96), he made a short excursion from his head-quarters, the Seriba Ghatta, westward to Kurkur and Danga, positions formerly visited by Petherick, and returning, planned a much more extended journey, when a fire broke out in the Seriba Ghatta on the 2nd December 1870, which not only destroyed the station, but with it the whole property of the traveller. Fortunately, a portion of his collection was at that time already on its way to Berlin. Provided with a few necessities at Seriba Siber, the head-quarters of the Egyptian troops, the indefatigable traveller made a tour in a part of Fertit hitherto unvisited by Europeans, from December 1870 to February 1871, during which he found that the Bachr-el-Arab is unquestionably the main stream of the basin which mouths in the Nile at the Bachr-el-Ghazal. Having been deprived by the fire of every instrument by means of which any mechanical reckoning of the distances traversed during this journey could be made, the explorer, with an energy perhaps unexampled, set himself the task of counting each step taken, and in this way constructed a very satisfactory survey of his route.

Zoology.

The Therapeutic Use of the Poison of Various Animals.—This practice has been revived in France by several medical men, its chief advocate being no less a person than Dr. Télèphe Desmarais, the president of the Société humanitaire et scientifique du Sud-Ouest de la France. The poison is applied by inoculation. Experiments with the poison of Hymenopterous Insects, of the Weevils (*Trachinus*), and of the viper, &c. are still in progress. M. J. B. Corbiot reports on cases of intermittent neuralgia, which he has cured by the application of wasps; and Dr. Ohei relates the case of a man suffering from oedema in consequence of heart-disease, from whom all symptoms permanently disappeared, after he had been accidentally bitten by a viper. Great caution should be observed in these experiments. In Brazil it is a popular belief that snake-poison is a specific against elephantiasis. A negro whose life had become intolerable in consequence of this terrible disease insisted on the latter remedy being tried on him in the hospital at Rio Janeiro. The medical men remonstrated with him in vain, and the snake (a species of *Trigonocephalus*) was procured, but after being bitten by it, the man succumbed in a short time from the effects of the poison.

The Origin of the Domestic Turkey.—Hitherto ornithologists have been divided in their views regarding the origin of the domestic turkey, some believing with Linnæus that the European bird is a descendant of the wild race inhabiting the United States, others holding an opinion originally expressed by Mr. Gould, that it is the domesticated Mexican race which this ornithologist distinguished under the name of *Meleagris mexicana*. Mr. J. A. Allen, in a paper on the Mammals and Winter-Birds of East Florida, which is mentioned below, devotes a separate chapter to an examination of this question, and shows that the Northern and Mexican birds are not specifically distinct. The domestic turkey, in fact, was first introduced into Europe from Mexico about 1524, and subsequently into the United States from Europe: a fact which admits

* Corresponding to the rainy season under the equator, the Ogowai has a considerable rise in April and a lesser in October.

of an easy explanation, since in their advanced condition of civilisation the native Mexicans had succeeded in domesticating the turkey, and this their more savage neighbours on the north did not accomplish. The turkey, after having been brought to Europe nearly a century before the establishment of permanent settlements in the United States, was introduced thence into America with the other domestic animals.

Chicago Academy of Sciences.—The zoological collections of this institution, which were destroyed by the calamitous fire, were much more extensive than is generally supposed. It appears from a report drawn up by Dr. J. W. Foster, President of the Academy, and Mr. W. Stimpson, Secretary, that in addition to the general collection, the loss of which can be made good, several special collections were destroyed containing types which can never be replaced: among these were Walsh's State-collection of Insects; the Smithsonian collection of Crustacea which filled over 10,000 jars and contained the types of the species described by Dana, Stimpson, and other American authors; the Invertebrates collected by Stimpson on the U. S. North Pacific Exploring Expedition; the collection of marine shells of the Atlantic coasts of the United States; and finally 15,000 specimens of fossils, including two mounted skeletons of *Mastodon*. In spite of this terrible disaster the Academy is making every effort to reoccupy its place among its sister institutions. The publication of its Transactions will soon be resumed. The president and secretary appeal to their correspondents for the donations of sets of publications for the past few years to replace those lost.

Affinities of the King-Crab.—Prof. Owen has recently read an elaborate paper before the Linnean Society on the structure and affinities of the American king-crab (*Limulus polyphemus*), the conclusions at which he has arrived being directly opposed to those of van Beneden (*Academy*, vol. iii. p. 30). After a very minute description of the anatomy of the nervous and muscular systems of the *Limulus*, Prof. Owen thus sums up:—"Some objected to the king-crabs being called Crustacea; there was more ground, he thought, for objecting to call them Arachnida or Myriapoda. One may call *Limulus* a Crustacean, and yet discern in its anatomy the evidence of its more generalised structure than in Malacostraca; its type preceded that of either macrourous or brachyurous Crustacea, and indicates characters subsequently appropriated by and intensified in the air-breathing members of the Apterois Insecta of Linnaeus."

The officers of the New Zealand Institute have issued the third volume of their *Transactions and Proceedings*, a periodical which is not only of the greatest importance to the colony, but one fairly claiming a place in general scientific literature. We may remind our readers that the New Zealand Institute was founded under the auspices of the colonial government with the object of advancing art and science, pure and applied, as well as other branches of knowledge, and of concentrating scattered efforts under the direction of one establishment. Five provincial societies, the Wellington Philosophical Society, the Auckland Institute, the Philosophical Institute of Canterbury, the Otago Institute, the Nelson Association for the Promotion of Science and Industry, have in this way been incorporated in the general establishment, and any society which may be founded in future can likewise be affiliated if it consist of not fewer than twenty-five members, subscribing in the aggregate a sum of not less than fifty pounds annually. The proceedings of the several societies, and the papers read before them, are submitted to the Institute, which publishes in an annual volume a current abstract of the former, and under the title "Transactions" such of the papers as are of peculiar interest. The system works admirably, and the matter requiring publication increased so greatly last year that the present volume consists of 110 pages of "Proceedings," and 363 pages of "Transactions," the latter being illustrated by 30 lithographic plates. Of the sixty-eight articles admitted to the "Transactions," we shall here only refer to the more important zoological papers. Mr. Walter Buller describes a new rat indigenous in New Zealand. Important contributions to ornithology, at present the favourite pursuit of colonial zoologists, have been made by Messrs. W. Buller, T. H. Potts, Captain F. W. Hutton, and W. T. L. Travers. Dr. J. Hector, the energetic editor of the series, has taken up the study of Fishes. Finally, Messrs. L. Power and W. Buller communicate their observations on *Latrodectus*, the poisonous spider of New Zealand.

The ninth part of the *Anales del Museo Publico de Buenos Aires* (Buenos Ayres, 1871) contains a continuation of Professor Burmeister's paper on the fossil remains of the gigantic sloths which are generally comprised under the name of *Glyptodon*, but which have been divided by the author into four generic groups, *Panochthus*, *Hoplophorus*, *Glyptodon*, and *Schistopleurum*. In the present part the author treats of the second of these groups, the description being illustrated by admirably executed lithographic plates.

The second volume of the *Bulletin of the Museum of Comparative Zoology at Harvard College, in Cambridge, U.S.*, has now been completed by the issue of Nos. 3, 4, and 5. No. 3 is a lengthy paper (pp 161-450) by J. A. Allen, "On the Mammals and Winter-Birds of East Florida, with an examination of certain assumed specific characters in

Birds, and a sketch of the Bird-Fauna of Eastern North America." No. 4 contains short "Directions for Dredging," by Count Portalets; and No. 5, Additional Remarks on *Echini*, by A. Agassiz. We have also received at the same time No. 1 of vol. iii. of the same periodical, in which W. H. Dall gives a Report on the *Brachiopoda* obtained by the United States Coast Survey Expedition, in charge of L. F. de Portalets, with a revision of the *Craniidae* and *Discinidae*.

Dr. WILLIAM BAIRD. Senior Assistant in the Zoological Department of the British Museum, died on Saturday, January 28, after a protracted illness. He was born in 1803 at Eccles in Berwickshire. After having served as surgeon for ten years in the navy of the East India Company, he accepted in 1841 an appointment in the British Museum which he held to the time of his death. His most important work is *The Natural History of the British Entomostraca*, published by the Ray Society in 1850.

Botany.

The Structure and Classification of Compositæ.—At the meeting of the Linnean Society on February 1st an important paper was read by Mr. Bentham, the president of the society, on this subject, to which he has recently given much attention. The order Compositæ or Synantheræ is remarkable not only from its enormous size, but also from its extremely natural and well-marked characters, there not being a single instance in which it is doubtful whether a plant should be referred to this order or not. All the essential characters of the androecium, pistil, structure of fruit, structure of seed, and inflorescence, are absolutely constant throughout the ten thousand species comprised within it. This very fact, however, renders its subdivision into tribes and genera a matter of extreme difficulty, the systematist being compelled to adopt characters as generic which in other orders would hardly be considered as specific. The parts of the plant from which the best distinguishing characters are derived were treated at length by the author under the following heads:—1. Sexual differences in the florets contained in the capitulum; these are sometimes constant in large genera or subtribes, sometimes variable in closely allied species. 2. Di- and trimorphism; very rare in Compositæ except as connected with sexual differences. 3. Differences in the pistil; these depend on variations in the style where it is not used for its primary purposes in connection with the fertilisation of the ovules. 4. Differences in the fruit and its pappus. 5. Differences in the androecium; these depend on the minute appendages or tails which have apparently no functional office. 6. Differences in the corolla; numerous and important. 7. Differences in the calyx; these are not important. 8. Differences in the ultimate inflorescence and bracts; not of essential importance. 9. Differences in foliage; there is no type of foliage in Compositæ which may not be found in several other orders, although the leaves are never compound with articulate leaflets; the opposition or alternation of the leaves is sometimes of tribal importance, sometimes not. 10. Geographical distribution; on this portion of the subject a further paper is promised at a future meeting.

Change of Habits in a Plant.—We lately recorded (*Academy*, vol. ii. p. 522) a singular instance of a change of habit of comparatively recent occurrence in the case of the Kea or mountain-parrot of New Zealand. The same observer, Mr. Thos. H. Potts, has noted in *Nature* (No. 118, Feb. 1st) a somewhat similar instance of the change of habit in a plant. The *Loranthus micranthus* is one of the most showy parasites belonging to the New Zealand flora, and is nearly allied to our mistletoe. Originally parasitic on native trees belonging to the orders Violariæ and Rutaceæ, it appears now to have nearly deserted these in favour of trees introduced since the colonization of the islands by Europeans, especially the hawthorn, plum, peach, and laburnum. The latter tree was only introduced in 1859, and appears now to be one of its most favourite resorts, where it is abundantly visited by the (also introduced) European honey-bee.

Physics.

The Relation between Density and Capillary Attraction in Saline Solutions.—M. Valson (*Compt. rend.* 74, 103) has determined the density D and the height of column H in the same capillary tube of a series of saline solutions, and finds the product of the density (at 15° C.) by the height of column in millimetres to be sensibly constant for all the solutions examined: DH = 61.5 or 62. Each solution contained an equivalent in grammes of the anhydrous salt dissolved in a litre of water; salts of the alkaline and alkaline earthy metals, of manganese, zinc, cadmium, lead, and silver, were examined. In the cases of lithium chloride and silver nitrate, the extremes of the series employed, having the equivalents 42.5 and 170, the capillary heights were 66.8 and 54.2 mm. The capillary height may be calculated from the density, within very narrow limits, by the formula: H = 118.5 - 56.8 × D, and the increase in the height of the capillary column on passing from one normal solution to another is proportional to the diminution in density of the solution.

On the Insulating Power of Various Kinds of Glass.—M. Ekman (*Ann. Ch. Phys.* xxiii. 349) finds that a glass containing much soda and little potash is a far better conductor than one containing little soda and much potash, the intermediate varieties exhibiting intermediate conductivity. In his experiments two slips of tin-foil were pasted, one to the centre, the other to the edge, of each sheet of glass, which, with the exception of the portion between the slips, was entirely covered with varnish. The centre slip was connected with the knob of a Leyden jar—equally charged in each case—the edge slip with the earth, and the time necessary for the spontaneous discharge of the jar then observed on each occasion. Moreover, the amount of water absorbed by equal weights of the several samples of pulverised glass was determined; and the results clearly indicate that the insulating power depends on the composition of the glass, and not on its attractive power for water. Of two glasses, the better conductor attracted the less amount of water.

Vaporisation of Mercury.—The *Comptes rendus*, lxxiii. 1356, contains a most important and lengthy memoir by M. Merget on the diffusion of mercury vapour. The only observations on this subject hitherto recorded are those of Faraday, who considered that the vaporisation of mercury entirely ceases at a temperature of -7° C.; and that at temperatures above this limit the vapour given off (contrary to the general law of diffusion of elastic fluids) forms over the liquid a layer of but slight thickness, which does not exceed a few centimetres in height at ordinary temperatures. These conclusions being so entirely at variance with the present dynamical theory, M. Merget was led to study the phenomena anew; and his first efforts were directed to the discovery of a reagent of greater delicacy than gold-leaf, which, as is well known, was the material employed by Faraday as the test of the presence of the metallic vapour. He finds that paper washed over with an ammoniacal solution of nitrate of silver, or with chloride of gold, platinum, palladium, or iridium, is capable of indicating the presence of infinitesimal traces of mercury, the action of the latter on either of the above metallic salts being to reduce the metal of these compounds, and thus form a more or less intense stain on the paper. By aid of this delicate test he has proved: (1) that the vaporisation of mercury is a continuous phenomenon, that it does not even cease on the solidification of the metal; (2) that the vapour possesses considerable diffusive power, which, though not measurable with exactitude, appears to attain a limit little short of that assignable to it by the dynamical theory of gases; (3) that, like other elastic fluids, mercury vapour condenses on such substances as carbon, platinum, &c. which exert no chemical action on it, and that it passes with great facility through porous bodies, such as wood, porcelain, &c. M. Merget discusses numerous practical applications of the above principles, more especially “a method of photography without light,” based on the above reducing action exerted by mercury on salts of certain metals.

Heat evolved by the Dissolution of Metallic Oxides.—In the *Academy*, ii. 443, we referred to a series of experiments of M. Ditte, showing that metallic oxides prepared by calcination at high temperatures evolve much more heat during solution than the same oxides do when prepared at lower temperatures. M. Marignac (*Archives des Sciences physiques*, xl. 209) has repeated these experiments with the oxides of zinc and magnesium, and arrives at entirely different results. He finds that at whatever temperature these oxides are prepared the amounts of heat evolved by their dissolution in dilute acid are sensibly the same. Specimens of magnesium oxide, prepared from the nitrate, and heated to 440° , to a dull red heat, and to a bright red heat respectively, disengaged 852, 862, and 867 heat-units per gramme dissolved. Similarly, zinc oxide, prepared at 350° , at a dull red, and at a bright red heat respectively, evolved 261, 266, and 264 heat-units. M. Marignac found it not possible to entirely decompose magnesium nitrate at 440° , or even at a dull red heat, the respective products containing only 97·5 and 98·5 per cent. of the oxide; if then the above numbers be corrected from this error, they accord more closely, becoming 874, 875, and 876, instead of 852, &c. M. Ditte used the mercury calorimeter for his determinations; and M. Marignac is of opinion that the anomalous results which he obtained are in great measure attributable to the untrustworthy nature of this instrument.

New Publications.

- FITTIG, R. *Grundriss der unorganischen Chemie.* Leipzig: Duncker und Humblot.
 FLAMMARION, C. *L'Atmosphère.* Paris: Hachette.
 GIEBEL, C. G. *Thesaurus Ornithologiae.* Leipzig: Brockhaus.
 LANG, V. v. *Zur dynamischen Theorie der Gase.* Wien: Gerold's Sohn.
 LEYDIG, F. *Die in Deutschland lebenden Arten der Saurier.* Tübingen: Laupp.
 MEUNIER, S. *Le Ciel géologique.* Paris: Didot Frères.
 NEWTON, Sir Isaac. *Mathematische Principien der Naturlehre, aus dem Lateinischen übers. u. durch Zusätze erläutert von Prof. J. Ph. Wölfers.* Berlin: Oppenheim.

- NITSCHE, H. *Beiträge zur Kenntniss der Bryozoen.* 2. Heft. Leipzig: Engelmann.
 PAULY, Alphonse. *Bibliographie des Sciences médicales, avec une introduction par le Dr. Ch. Daremberg.* 1^{re} fasc. Paris: Tross.
 PRATT, J. H. *Treatise on Attractions, Laplace's Functions, and the Figure of the Earth.* London: Macmillan.
 PRITZEL, G. H. *Thesaurus Literaturae Botanicae.* Neue umgearbeitete Auflage. 1. Heft. Leipzig: Brockhaus.
 QUETELET, Ad. *Notice sur Sir John F. W. Herschel.* Bruxelles: Muquardt.
 SUTER, H. *Geschichte der mathematischen Wissenschaften.* 1. Thl. Zürich: Orelli, Füssli und Co.
 WILSON, J. M. *Solid Geometry and Conic Sections.* Longmans.
 WUNDT, W. *Nouveaux Éléments de la Physiologie humaine.* Trad. de l'allemand sur la 2^e édit. et augm. de notes par le Dr. Bouchard. Paris: Savy.

History.

Councils and Ecclesiastical Documents relating to Great Britain and Ireland. Edited, after Spelman and Wilkins, by A. W. Haddan and W. Stubbs. Vol. III.

THE first volume of this important national work contained the history of the early British, Cornish, and Welsh churches up to the year 1295, when the latter may be considered to have been absorbed in the English. The second volume, which will contain the early Scottish and Irish documents down to the time when the Irish church also became subject to England, has been delayed by Mr. Haddan's illness; and it has, therefore, been thought better to publish the third volume (which includes everything relating to the Anglo-Saxon church down to Alfred) at once, especially as it was required for the use of the Theological School at Oxford. The fourth volume will carry on the Anglo-Saxon church history to the Norman conquest. It need hardly be said how welcome a critically sifted collection of the materials of our church history is when so much doubt has rested on some of the documents, and when the fierce disputes that have arisen on so many of the facts have been still further complicated by the critical difficulties. In the first volume, the groundlessness of the so often alleged “Orientalism” of the British churches was shown, and the British Easter controversy was placed upon its right footing, viz. of a mere confusion of cycles. After the free Celtic churches had submitted to the claims of Rome, the mischief of appeals to the papacy, the gradual diminution of freedom and self-government in the native Welsh church as English influence and law were brought to bear on the principality, were well illustrated.

It is sometimes said that the change of the modern historical point of view has an unsettling effect on the mind, since so many great men, once looked at with a species of awe, are now criticised freely on distinctly new grounds. Thus Charlemagne does not hold the same exalted place as once he did, in the eyes of those who look on him as a Frankish tyrant who crushed the liberty of the free Saxons of North Germany; while similarly the character of St. Boniface is not so highly esteemed by those who think that he subjected the Germans to the rule of the Roman emperor as well as the Roman church. But these differing points of view serve to bring out the history more clearly on all its sides; the great men themselves have injustice done them unless their motives are fully allowed for, and the reasons of the course they took explained; and the result of modern enquiry has been to reveal to us something better than the great men, the emperors, and the popes. Neander first devoted himself to bringing out the really Christian inner life of each succeeding age. While the world seemed abandoned to the spiritual wickedness of

those in high places, the lives and writings of a series of men, from Bede to Izaak Walton (to take only our own country as an instance), were set forth to us as something to which men might turn with satisfaction from the blood-smeared pages of the empire or the papacy. Part of Keble's "Advent Sunday" in the *Christian Year* well expresses the character of Neander's work, and shows the change which he made in the conception of church history, of what was really worth study. Lives of Bede or Cuthbert, of Alfred or Anselm, show us that historical development of the Christian life which it was the object of Neander everywhere to trace out. Nor was he less anxious to follow the spread of the Christian movement in all directions. Nor is there a more interesting period than that in which England was Christianised, and rapidly became the basis from which to evangelise Germany and the North. The third volume, now before us, contains all the early part of this period, a period which can never lose its interest for ourselves. It is curious to see how Pope Gregory planned his new church on the lines of the old Roman provincial constitution of Britain. The two old Roman capitals, London and York, were each to be at the head of twelve sees. With the loss, however, of the Scotch Lowlands by the English kings of Northumbria, York lost its chance of equality with the southern province, and was gradually limited to its four bishoprics. The conversion of Ethelbert of Kent made Canterbury the ecclesiastical "metropolis" instead of London; and Kent having two dioceses in it, Canterbury and Rochester, preserves the memory of the time when Kent really formed two small kingdoms. York was, in Gregory's plan, to have been ecclesiastically the equal of the southern province; whichever of the two archbishops was the senior was to preside in the common synods. The later supremacy of Canterbury rested really on the civil greatness of the south, theoretically on a set of documents which labour under the strongest suspicion of forgery. Unhappily every question of this kind gave rise to forgeries, and certain of our great monasteries, such as Malmesbury, Peterborough, Croyland, have an unhappy pre-eminence in this guilt. Similarly, Gregory, having told the English that the third degree was the limit of prohibited marriages, the later canonists, who had monstrously extended the prohibition to the seventh degree (the cause of very great misery in Europe), forged a letter of Gregory to say that he had only meant the third degree to be a temporary arrangement until the English should become strong in the faith. It is curious to see how completely the Roman scheme failed. England was not to be converted according to a fixed scheme. The Gospel, under its Roman teachers, died out of Northumbria, and the whole work had to be done over again. Only in Kent can the Roman mission be said to have permanently succeeded. The real permanent conversion of England was effected by the missionaries of the free Celtic churches; they or their English disciples converted Scotland, and Northumbria, and Mercia, and East Anglia, and Wessex (the Roman missionary Birinus had, as usual, been expelled); and Wilfrid, coming from the north, found, even at the last moment, Sussex unconverted, though so near to Kent. Wilfrid, however, had been attracted by the superior civilisation and the exalted claims of Rome, and he bowed the free English churches to submission. Theodore, a Greek of Tarsus, was sent by Pope Vitalian to organize the English church—and he organized a diocesan system throughout the country. The parochial system has also been attributed to him; but it is of later origin, and the mistake arose from construing "parochia" as if it meant *parish*, whereas the word really means *diocese* up to the twelfth century. To Theodore was also due the organiza-

tion of a system of church discipline which had important consequences. And here our authors have done excellent service in extricating the genuine "Penitentials" of Theodore, Bede, and Egbert from the mass of alien matter with which they had become encrusted in the course of ages. Additions from much later systems, and a great infusion from Frankish sources, had thrown the whole subject into confusion. Rules from Charlemagne's Capitularies, from a work of Theodulf of Orleans (A.D. 797), from one of Halitgar of Cambray (A.D. 825), had been mixed up with the English rules. The genuine Penitential, compiled by a disciple of Archbishop Theodore, still exists in a MS. of Corpus College at Cambridge; while Wasserschleben, in his *Penitentials of the Western Church*, published at Halle, 1851, has given us the genuine work of Bede; and the genuine work of Egbert is contained in the Bodleian MS. 718 of the tenth century, which Bishop Leofric gave to Exeter cathedral. The sharp discipline of these codes shows how rude the state of society was, and the list of crimes (as in the Frankish regulations) gives an appalling picture of human degradation. Something, however, may be allowed for the Roman custom of stating every possible case, and one would fain hope that many of the unutterable abominations mentioned were not common; some of them look like the dreaming imaginations of corrupt monks. The light, however, thrown on the relations of the different ranks of society, and the state of manners, is very considerable. Another set of the documents collected by our authors consists of the "professions of faith" made by newly appointed bishops to the primate. One of the most curious on the roll at Lambeth is that of the Cornish bishop Kenstec to Archbishop Ceolnoth, before the year 870. The earliest of all is that of Eadulf, Bishop of Lindsey, in 796, and the word "Eboracensis" has been interpolated in it, as evidence of the supremacy of Canterbury. That of Denebert of Worcester, in 798, is important as quoting the Athanasian Creed—the first mention we have of it in England—"Scriptum est, Quicunque vult salvus esse ante omnia opus est illi ut teneat Catholicam fidem," &c. This would agree with the view which assigns to Alcuin, the English friend of Charlemagne, such an important place in connection with it, for this is just when Alcuin was at the height of his activity. A number of Alcuin's letters are included in this volume, some of them as yet unedited. One of them contains the earliest mention of the *Ordo Romanus*. In several letters he urges on his friends the use of St. Gregory's Pastoral. It was enjoined upon all bishops at their ordination in France under Hincmar, and was translated into English by Alfred. Another important set of documents is supplied by the Anglo-Saxon charters (published mainly by Kemble in his *Codex Diplomaticus Aevi Anglo-Saxonici*). They prove the existence of many more synods than the historians mention. One of the strangest things is that Archbishop Theodore should have appointed Cloveshoo as the regular meeting-place, and that some important synods were held there, and yet that the place cannot really be identified. It was near London (then part of Mercia), for St. Boniface speaks of one of them as "Synodus Londinensis;" but the attempts at identification are mere guesses. Our authors discuss at length the charters of Ethelwulf, which were long supposed to have been the legal origin of the payment of tithe in England, and which Kemble has so acutely examined. Unfortunately the question is complicated by the very large number of forgeries. It is painful to see the amount of forgery of which the churchmen were guilty. Of the 240 charters in Kemble's first volume (the whole of which come into this period), about half are spurious. Professor Stubbs has found it necessary to mark even more than Kemble had done.

They are detected by the errors in the dates, the impossible sets of witnesses, the later style of the description, and by other clear evidences. A new edition of Kemble's *Codex* is much wanted, which should include the remaining Anglo-Saxon charters (there are some scores of them not included in it), with the Anglo-Saxon descriptions of property, &c. translated. Much help as to the dates is supplied in the work before us. It has been well pointed out by Kemble that during about eighty years the Anglo-Saxon Chronicle is wrong by two years, the northern chroniclers giving the right dates. Thus Egbert is usually supposed to have begun his reign in 800, while the real date is 802. With this view all the genuine documents here collected agree. Forged papal bulls and letters too exist in considerable numbers, and we cannot too much praise the care and skill with which all these documents have been investigated. The student meets with the same difficulty in reading early church history, where the forged writings assigned to the early fathers equal the genuine ones in amount. There is some reason to assign a certain part of the interpolations in genuine patristic writings to the age of Alcuin, when official copies were made of the old church documents. In England something is perhaps due to the age of Dunstan, as respects the charters—something to that of Edward the Confessor; but the *scriptorium* of a great monastery was the workshop where these formidable weapons of attack or defence were being continually produced. The pious fictions of the early Christian king Lucius, of St. Paul's having himself preached in England, and so on, stand on a different ground—they are merely instances of the growth of legend; but the former kind cannot be excused, for they are conscious inventions—like the forged donation of Constantine to Pope Sylvester or the False Decretals. If any of them were done with a pious object, or with any worthy motive whatever, it would be a heavy punishment to their authors to know what a cloud of doubt their acts had spread over church history and on many of the things they valued most. All the more are our thanks due to those who have not been afraid to sweep away the time-honoured impostures, and trust to the truth alone to make its way. The confidence placed in them, in their conscientious regard for truth and admirable consistency in searching it out, is and will be a true reward.

C. W. BOASE.

The First English Conquest of Canada; with some Account of the Earliest Settlements in Nova Scotia and Newfoundland. By Henry Kirke, M.A. Bemrose.

THIS volume suggests to us that the charge of keeping alive the memory of brave men—that old prerogative of the “sacred poet”—has in modern and prosaic times become the special province of the Record Office. Our colonial state papers of the seventeenth century have chiefly furnished Mr. Henry Kirke with materials for the biography of an ancestor respecting whose brilliant though abortive conquest of Canada and Nova Scotia under Charles I. neither Haliburton nor Macgregor knew enough to give more than a bare and very inaccurate notice. In 1627, on war breaking out between France and England, certain London merchants obtained a royal patent authorising them to break up all French settlements in those provinces, and to establish English plantations in their stead. As a preliminary step, they sent out three ships well manned and equipped; Captain David Kirke, the eldest son of a member of the company, being in command of the expedition. Its immediate object was to intercept a large French squadron, then on its way to Quebec, and conveying emigrants, artillery, and heavy stores. This was fallen in with and attacked on the St. Lawrence; its admiral, De Roquemont, whose over-freighted ships were

unfit for fighting, found it necessary to surrender after the first broadside, and Captain Kirke had the no small satisfaction of bringing his own fleet of three sail back into English waters with 138 French cannon in their holds, and De Roquemont with other prisoners who could afford ransom on board. Only we could wish that the narrative of so spirited and successful an adventure had told us what became of the crowd of non-combatants taken with the eighteen captured vessels; are we to infer from this silence that the merchant-adventurer had as few qualms of “nyce conscience” as Chaucer's shipman, and does the “fury of the French king and council” when news of the disaster reached Paris, with the burning of Kirke in effigy in the Place de Grève amid popular execration, point to a deed of blood not justifiable even by the barbarous war-code of the time? The seizure of this convoy gave the brave captain the key of Quebec and its dependent settlements by cutting off their supplies; they fell one by one into his hands, in a second expedition made with a larger force, when, having taken possession of the whole country, he came home again triumphant in the autumn of 1629. In England, however, a bitter disappointment awaited him. During his absence peace had been concluded, under the articles of which all Kirke's new-made conquests were to be restored, and all merchandise seized at the taking of Quebec was to be given up to its owners. Falconbridge's “foot of honour” was the sole set-off the luckless hero could obtain against his broken hopes and damaged fortune; the De Roquemont arms, with their lion prostrate and chained, were added to his escutcheon, and he was subsequently knighted. Having soon after his return from Canada succeeded to an ample patrimony, and having taken a wife from a family as rich as his own, a bright and prosperous life in this country lay before Sir David Kirke. With such a prospect, few men would, after his past experience, have desired to tempt fortune once more in the New World. But his was one of those rare natures, eager, dauntless, resolute, which remain unchecked by disaster and untamed by wealth. Keeping steadily in view, as his chosen task in life, the conduct of some extensive scheme of colonisation, he waited patiently for a fitting opportunity. This offered itself when Lord Baltimore, the governor of Newfoundland, disgusted with the climate, and galled with the difficulties of an infant settlement, deserted his colony. In 1638, Sir David Kirke, having obtained a grant of the whole island, sailed out as its ruler. During the next twelve years while the energies of the mother-country were spent upon civil strife, Kirke was patiently developing the resources of Newfoundland; above all, the fisheries, in which his practical sagacity recognised the true basis of its prosperity. Upon the rupture between Charles and his parliament, he declared for the king, to whom, when his affairs grew desperate, he offered an asylum; he also proffered aid to Prince Rupert after Charles' execution. For these things there came in 1651 a day of reckoning for the high-church and royalist governor, who was cited to appear personally before the Council. What we gather from the narrative of the transactions—which however does not tally with the statement made p. 186—amounts to this, that after some delay and pecuniary loss through temporary sequestration, the matter ended in Kirke's forfeit only of the ordnance and forts in Newfoundland; he retained both his office and all his private property. All circumstances considered, he was leniently dealt with, and we think that biographical zeal carries the author too far when he talks of his hero's “spoliation” by the Commonwealth. But it strikes us that this word exactly applies to the act of the king who stripped his widow and children of the home where his own father had, in time of direst need, been offered shelter. Sir David Kirke died in 1655–6, and after the Restoration,

Charles II., probably urged by court favourites, issued a warrant depriving the family of their Newfoundland estates, in favour of the heirs of Lord Baltimore, who on giving up that island had obtained a grant of Maryland in its stead.

Apart from the interest which invests the personal history of an early ruler and shaper of a now prosperous English colony, this narrative has, we think, a special significance as the history of a career typical from first to last of that tragic incompleteness which marred the lives of so many of our early maritime discoverers and adventurers. Sir David Kirke suffered, dared, and wrought much in his time, yet fate denied him the just guerdon of endeavour. Men of kindred character have, with not more than equal chances, established states, and founded dynasties; Kirke's early conquests were no sooner won than wrested from him, and after his death his sons were robbed of their heritage. His heroic qualities, with the service England reaped from them, might have given him some place on the roll-call of her worthies; it has been left to the piety of a remote descendant to revive his forgotten name and neglected memory.

GEORGE WARING.

Intelligence.

V. Palmé advertises his reprint of the *Gallia Christiana*, a sort of conclusion to his excellent reprints of the *Acta Sanctorum*, the *Histoire littéraire de la France*, and the French Historians. The book is reprinted exactly, but large supplementary matter is added. The old edition was defective in several ways; and as to the monasteries, it could not be compared to our own *Monasticon*. The reprint of these four great works does the highest credit to French energy.

We would call attention to the Ohio Valley Historical Series of Reprints (Trübner), e. g. that of Bouquet's expedition against the Ohio Indians in 1764, Colonel James Smith's captivity with the Indians, and other works illustrating the border history of the United States. The importance of the positions on the Ohio (e. g. Pittsburgh, so named after the elder Pitt) was well known to the French when they tried to make a chain of forts to connect Canada with Louisiana. Washington's first appearance in history is in connection with the attempt of the Ohio Company to form settlements there in opposition to the French attempts to prevent the English colonies from extending westwards.

Contents of the Journals.

Lit. Centralblatt (Dec. 13) reviews Roerting's Old-French translation of Ovid's *Remedia Amoris* (a part of the allegorical poem *Les Echecs amoureux*), important for its relation to the *Roman de la Rose*, and as illustrative of the dialect of Picardy (e. g. *empeese* for *empêche*). A mention of the "Constable Bertran," i. e. Bertrand du Guesclin, as a knight worthy to be compared with Hector and Gawain, fixes the date of the work to the last part of the fourteenth century.—Jan. 6.—A review of Kapp's *Frederic the Great and the United States of America* points out Frederic's views as to the rights of neutrals, and as to privateering, and rejects the American claim of having done much for international maritime law.—Jan. 20.—Notices Kraus' *English Diplomacy in 1527*, when, owing to Ferdinand I.'s threatening attitude in Burgundy and Italy, Henry VIII. showed sympathy with John, King of Hungary, and Zapolya, the Voivode of Transylvania. One of the letters of Ferdinand to Henry mentions the disastrous battle of Mohacs, by which the Turks gained most of Hungary.

Gött. gel. Anz., Dec. 20.—Reviews J. van Lennep's *Travels in Asia Minor* very favourably (see *Academy*, vol. i. p. 224).—Geiger continues his account of the Humanists; this time he gives an account of Charitas Pirkheimer, the Abbess of St. Clara in Nuremberg—one of the few German ladies of that age who are interesting in this point of view.—Konrad of Würzburg's *Parthenopier und Meliur*, &c. is noticed as important in the history of medieval romance. "Parthenopaeus" has attracted the attention of Sir Walter Scott and S. Rose among ourselves.—Jan. 3.—Compares Piot's *Cartulary of S. Trond* (near Liège) with Wanter's book "on the origin of the communal liberties of Belgium," which serves as a sort of commentary on the former. The earliest charter of liberty which we know of for the cities in the north of Europe is that given by Bishop Theodouin of Liège to Huy, in the eventful year 1066.—Geiger reviews an account of another of the Humanists, "Franciscus Fabricius Harkodusasius" (1527-1573).—Jan. 10.—Analyses Hehn's excellent book, *Kulturfälanzen und Haush-*

thiere, and Claretta's *Storia diplomatica dell' antica abbasia di S. Michele della Chiura*, important for Piedmontese history.—Jan. 24.—Contains a good account of the life of the Sicilian patriot, the Prince of Castelnuovo, who upheld the Sicilian constitution against the absolutist Queen Caroline, when she took refuge from Napoleon in the island. He suffered grievous imprisonment, and was not delivered till Lord W. Bentinck freed the prisoners and restored the reign of law. Unhappily, England failed to maintain the constitution after 1815, and Castelnuovo retired into private life, and spent his time and means in founding an agricultural institute and elementary schools, which were of the greatest benefit to his country in the evil times.—Jan. 31.—Wilken gives a summary of his researches as to the mystery plays of Germany in the middle ages, and compares them with those of France, &c.—There is also a notice of Hartmann's *Rede vom Glauben* (published from one of the Strasburg MSS. now burnt); and a spiritual poem of the twelfth century, apparently by an author who lived in Central Germany.

New Publications.

- BRUNNER, C. Hans v. Hallwil, der Held v. Granson u. Murten. Aarau : Sauerländer.
- CLASSON, Octav. *Kritische Erörterungen über den römischen Staat.* II. u. III. Rostock : Kuhn.
- EBERTY, F. *Geschichte des Preussischen Staates.* 6^{ter} Bd. bis 1815. Breslau : Trewendt.
- ERRERA, A., e FINZI, C. *La vita e i tempi di Daniele Manin*, corredato dai documenti inediti depositati nel museo correr dal Generale G. Manin. Venezia : Münster.
- FEUERWAFFEN, Quellen zur Geschichte der. Herausg. vom Germanischen Museum. 1^{te} Liefg. Leipzig : Brockhaus.
- JONES, Th. Wh. *A True Relation of the Life and Death of William Bedell, Bishop of Kilmore in Ireland.* (Camden Soc.)
- MEYER, Dr. Mor. *Die Wahl Alexanders III. u. Victors IV.* (1159). Göttingen : Rente'sche Buchh.
- PHILARET, Geschichte der Kirche Russlands. Uebersetzt v. Blumenthal. Frankfurt a. M. : Baer, Sotheau und Co.
- RECESSE, Die, und andere Akten der Hansetage von 1256-1430. 2. Bd. Leipzig : Duncker u. Humblot.
- SCHNEIDER, L. *Der Krieg der Triple-Allianz gegen die Regierung der Republik Paraguay.* 1 Bd. Berlin : Behr's Buchh.
- URKUNDENBUCH DER STADT LÜBECK. 3. Thl. 12. Lfg. Register. Lübeck : Grantoff.
- WILKENS, C. A. *Friedrich Mallet, Pastor zu St. Stephani in Bremen. Eine Biographie etc.* Bremen : Müller.

Philology.

Aeschyl quae supersunt in Codice Laurentiano veterissimo.
Edidit R. Merkel. Oxford : Clarendon Press, 1871.

THIS magnificent volume, at once a literary curiosity and a valuable aid to critical students of Aeschylus, stands on a par with the texts of the Vatican and Sinaitic MSS. of the New Testament as edited by Tischendorf, and of the Codex Bezae of the same by the Rev. F. H. Scrivener. The plan of all these is to represent, in ordinary Greek type, but with the minutest accuracy that is attainable in every particular, the actual text of the MSS. themselves. Obviously, if the task is performed in a perfectly trustworthy manner, this kind of transcript is much more generally useful than even photographs of the originals would be; for the one is very easy, while the other is often exceedingly difficult to read. The Medicean MS. of Aeschylus, now first presented to us entire, is one of the most difficult MSS. to decipher. A facsimile of it is not given in the present volume, to which we venture to think that a photographed page of the original codex would have formed an interesting and suitable frontispiece; but a specimen of the very crabbed, and, to ordinary eyes, well-nigh illegible, writing of the MS. is given in p. 140 of Dindorf's edition of the Scholia (Oxford, 1851).* By

* Page 140 of the MS., being page 43 of Merkel's folio, and containing *Choeph.* 373 to 416.

this we see at a glance that the scholia were appended by a different hand. They are in a cursive or semi-cursive character, much more legible than the text itself, and more approximating to the uncial form. The scholia, we regret to say, are not given at all in Merkel's volume. A careful consideration of them, *i. e.* a comparison with the text of the codex, will show that they must have been taken from some other copy than that from which the text itself was transcribed. They do not in all points harmonize with the readings they profess to illustrate; and it is highly probable that they were added by another and rather later hand and from some other source, after the text had been written. To illustrate this by an example or two from one play, though many might easily be given: in *Supplices*, 452, ἡ κάρτα νέκους τοῦ ἐγώ παροίχομαι, the schol. has καὶ τοῦτο ποιῶν ἐκτὸς ἔτοιμα τοῦ νείκους θεοῖς ὑπηρετῶν. Critics well-versed in tragic usage know that ἐγώ is hardly used unless there is emphasis on the person, which here has no place.* The true reading is τοῦτο δρῶν παροίχομαι, and θεοῖς ὑπηρετῶν was originally an independent scholium on the words τοῦτο δρῶν. Again, in *Suppl.* 879, ὁ σε θρέψας ὁ μέγας Νεῖλος, "that mighty Nile that nurtured you with its life-giving waters," is corruptly given in the Med. ὁ σε ἔρωτᾶς (*sic*) ὁ μέγας νεῖλος, the ψ having been mistaken for T, which it closely resembles in uncial writing. So in *Ag.* 1566, πρὸς ἄτα was written in the Med. for προσάθαι, as we may judge from the existing transcript, the MS. Flor. To the true reading, ὁ σε θρέψας, the gloss in the margin of the MS. evidently refers, ὁ Νεῖλός σε.

The MS. itself is believed to have been written in the eleventh, if not the tenth, century. It is the sole authority for four out of the seven plays, in so far as the few other existing copies are but transcripts from it. The greater part of the *Agamemnon*, and the beginning of the *Choephoroe*, have been torn away; and as the evil deed must have been done, as we know from the transcripts and early editions, some centuries ago, the chance of recovering the lost pages is, of course, though not absolutely impossible, well-nigh hopeless.

It seems by no means improbable that after the lamentable destruction of the great Alexandrian library, A.D. 651, a search began to be made, two or three centuries later, for such transcripts of the classic authors as had been taken, either for private or for public purposes, from the books at Alexandria or Pergamus, while those great libraries still existed more or less entire. Such transcripts (assuming their existence) would be of the highest authority, as being taken from the texts critically edited by the great scholars who flourished in those seats of learning. They would certainly have been written in uncial letters; and the copies from them, though made in the cursive, would be pretty certain to afford indications that uncial characters were under the eye of the copyist. In fact this is very often the case with the Medicean Aeschylus, which presents abundant proofs, in the very mistakes committed, that the archetypus was in uncial characters, and was mis-read by the transcriber. Such letters as Α, Α, and Δ, are often confused, as κεασαι for κέλσαι, *Suppl.* 16; δίνουσιν for λίνουσιν, *ibid.* 132; δεξόμενον for ἀδεξόμενον, *ibid.* 856; and Γ, Τ, Ι, as τὸν ταυον for τὸν γάιον, *Suppl.* 156; and, probably, ἀγρεῖ for αἰρεῖ in *Ag.* 126. Again, Ο, Θ, Ε, Ζ, are confused—as ἀρόεντ' for ἀρθέντ', *Suppl.* 2; perhaps θραρέ for ἐπάρη in *Cho.* 415; ζο εν for ιθεν, *Suppl.* 66; τὸ θύλος for τεβαλῶς,

ibid. 105; φωνεῖ ὁ for φωνεῖς, *Cho.* 374. None of the above mistakes could have occurred if the original copy had been in a cursive hand. Similarly, Ή has been mistaken for ΤΙ in *Suppl.* 776, and so γὰ βούνη ἔνδικον σέβας has been written, against the metre, for γὰ βούνη πάνδικον σέβας. The true reading is preserved by Hesychius; βούνη γῆ Αἰσχύλος. Of this class of early, and, we are disposed to think, trustworthy, codices, the Medicean MS. of Tacitus, the Ravenna MS. of Aristophanes, the Apollonius Rhodius of the Laurentian library at Florence, and the Laurentian Sophocles, preserved in the same volume as the Medicean Aeschylus, and by the same hand or hands, may probably be reckoned as examples. Merkel says that the first quaternion of leaves in the Aeschylus has been written at a somewhat later age than the rest, and that the scholia agree much more accurately with the text in the later than they do in the earlier part. "Ea scholia in primo Aeschyli quaternione convenient egredie suntque admodum ad scripturas et verborum poetae conformatiōnem omnem" (*Praef.* p. 6). It is of infinite importance to the critical determination of the text (as far as that can now be done) that these scholia represent a different and probably earlier recension.

The transcriber of the Medicean, then, had to copy an uncial MS. of very early date. In many parts it was so obliterated as to be nearly illegible; notably so in the chorus of the *Supplices*, 776-901. A good deal of this ode, as written in the Medicean, is downright nonsense; and it has exercised, more or less successfully, but, after all, with very doubtful results, the ingenuity of the critics. The transcriber was a conscientious man, and, happily for us, he appears to have known very little Greek. He therefore preferred to write what was and is mere gibberish, where he could not rightly decipher his codex, to making attempts at emendation. So we now have ίόφ δύι αἴθι κάκκασ (827), ἀμονεο ωτ ἐπάμιδα ησυδοντια τάπιτα (848), βάτεαι βαθυμι τροκακ παθών (864), λυμασιο ὑπρογασι λάσκει (877), and similar absurdities. That the archetypus was early uncial, and that the scribe knew little or nothing at least of ancient Greek, is clearly shown by two facts: the letters were written continuously and without division of words; and the scribe did not know how to divide the words in his cursive copy. Thus, at first glance, the codex throughout presents the singular appearance of verses written with the letters almost as often placed at wrong intervals as at right. It is impossible to conceive that a scribe who comprehended the meaning of the first two lines of the *Prometheus* would write them thus:—

χ θονδο μὲν ἐι στηλο υρ ὀν ἥκο μεν πέδο ν
σκύθην ἐσόμιον, ἄβατο ντ' ἐι σ ἐρ ημι αν.

The accents (which are often given, but generally by an after-hand, in uncial MSS.)¹ he seems to have copied faithfully; indeed (and the fact is curious), this is always the most accurate feature in Greek MSS. of all ages, mistaken or *false* accents being extremely rare. Very frequently an attempt has been made—whether by a later hand, we know not—to connect the letters to the right words by a line or an underbrace, *e. g.* χ-θονδο in the above passage, ἐι γυο πεδαι σ in *Prom.* 168, χει μων ο τυπω in *Suppl.* 35, οὐ κάν ευ-θ-ε-ῶ ντι νότ (οὐκ ἀνεν θέων τυῶς) in *Pers.* 164. We must, however, confess, on carefully comparing Dindorf's facsimile with Merkel's text, our doubts that these connecting lines are not always faithful copies of the transcriber's hand and intention. In cases where a very obvious letter might have been supplied by the most ordinary scholar, our worthy transcriber (we thank him heartily for his conscientious scruples) preferred to leave a blank or

* This remark throws a great doubt on the truth of a rather celebrated emendation of Porson's, *Agam.* 1291, "Αἴδου πήλας δὲ τασδ' ἐγώ προσενέπω, for τὰς λέγω. The true reading seems to be τασδ' ξεω προσενέπων, as λέγω and ξεω are known to be sometimes confused.

a dot,* to show that he could not certainly decipher it in his MS. Thus, in *Theb.* 2, he wrote δ.... ω for δωτις, in *Eum.* 6, τι ταν ι σ. ἄλλ... πᾶσι χθον ο σ καθέξετο, and just below (9),

λιπώνδε λι μηνη. δ.. λία.. τε χοι ρ ἀδα,

though ἄλλη and δηλίαν (*Δηλίαν*) χωράδα were clearly right. In *Prom.* 480, οὐ χριστὸν is written ὅνχρ... στὸν, in 492, ξυνεδρίαι is συν ε....ια, &c. In many cases a comma has been added underneath, to show the separation of united words, as σπλάγχνων τε λειότητα, signifying that the noun was not τελειότης, *Prom.* 493, νέκου στ-ῶνδ, *Suppl.* 452, οἵ τε τὸς-ούσων for οἱ τε τὸ Σούσων, in *Pers.* 15, where τετὸς formed one word by the first hand. On the whole, then, the Medicean MS. of Aeschylus is very trustworthy on these two points; it was certainly taken from a very old copy, and it certainly was not in the least or minutest matter tampered with by the copyist. The chief source of doubt thrown on our text (apart from merely accidental corruptions) is the fact that there must have been other ancient recensions of the plays, since the existing scholia, as we have already said, do not in all cases harmonize with the Medicean text. We think that Merkel's somewhat brief preface, which is not particularly interesting or explicit (and which, moreover, is written in rather "crabbed" Latin), might well have pointed out some of the inferences we have ventured to draw. The principal points which he does put forward with respect to the codex are briefly these:—

1. That the loss of the greater part of the *Agamemnon*, and part of the prologue of the *Choephoroe*, took place before the MS. was brought from Byzantium into Italy in 1423.

2. That fourteen pages of the MS. were lost subsequently to the original mutilation. If we understand aright Merkel's rather obscure argument, an inscription of about that period in the MS., at the end of the *Supplices*, enumerates among the contents of the then existing codex the *Agamemnon* τὰ μετὰ τὴν ὀλωσιν τοῦ Ἰλίου, and the *Choephoroe* "by name." The words are written in very contracted form, and the interpretation of them is ours, not Merkel's. The syllable ὠλ is written over αλ, but a little beyond it. Does this mean ὄλωλε, i. e. "the part of the play subsequent to the capture of Troy, is lost"? For the *lacuna* in the MS. is from 310 to 1066. The *Choephoroe*, as is well known, in the present state of the MSS., and in the two earliest editions, is continued without the title, as part of the *Agamemnon*. Hence it appears that the first part of it was torn out subsequently to the above inscription.

3. That the first *quaternion* of the Aeschylus was written by a different hand from that of the Sophocles which precedes, and is somewhat later than the rest of the Aeschylus.

4. That the scholia in the first *quaternion* agree with the recension of the text they illustrate, while the scholia to the rest belong to one considerably different.†

5. That the original writing has been extensively retouched and altered by a later, but still early, hand, to suit the readings of the codex from which the scholia were copied.‡

* Merkel, however, does not say whether the dots printed in his text are in the codex, and whether he intends them, or the scribe intended them, to represent *erasures* or *omissions* of letters.

† "Aeschyli quaterniones posteriores decem verborum poetae longe diversam habent recensionem ab ea, quam scholia sequuntur." (Praef. p. 6.)

‡ "Manus recentior, plerumque manifesta scholiorum scribae, toto corpore, singulis plus sexages interdum paginis, erasis aut obliteratis primae manus scripturis intulit quaecumque in eo exemplari, unde scholia deprompta sunt, discrepabant, omissis scilicet qaae excedebant patientiam." (Praef. *ibid.*)

6. That the numerous errors in the codex are due to the fact that it was written at a period when accurate knowledge was at a peculiarly low standard; but that, as no attempt at correction by guess or fraud was made, the true principle of emendation must rest on the endeavour to correct the mere blunders of the scribe.*

Whatever may be the faults and shortcomings of this edition, we must allow that the task was an exceedingly difficult one, and that it has been executed in a manner that reflects the greatest credit on all concerned in it. The MS. itself is so difficult to read that in almost numberless points it will seem to one eye to mean something slightly different from the reading copied from it by another. Thus, in the facsimile page of Dindorf, already alluded to, ἄλλα διπλῆσ γὰρ τῆσδε μαράγμησ is written quite regularly, as any one well acquainted with Greek MSS. would admit; and we do not think that Merkel correctly prints it ἄλλαδ-ι πλῆσ γὰρ τῆσδε-μαράγμησ, the ε being continued to join the μ after the regular custom of the cursive writers. Again, the facsimile seems to give χέρες οὐχ δισει rather than δισιε.† In βροτῶν τλήμονι καὶ πανόρωγι the facsimile shows nothing of the spots given by Merkel, τλήμον...ι...καὶ, which should indicate lost or obliterated letters. What the facsimile gives as θινομένου, Merkel edits as θινομένου, which, no doubt, is more likely to be correct. Dindorf's δλλυμένησ is Merkel's δλλυμένησ, and ἔμτα ποτάται seems in the facsimile to be ἔμποποτάται. And if all these discrepancies occur in a single page, it will readily be granted that nothing short of photography would present to us the original codex in a thoroughly satisfactory manner.

F. A. PALEY.

PRONUNCIATION OF LATIN.

TO THE EDITOR OF THE ACADEMY.

Hampden Sidney College, Va., Jan. 23, 1872.

SIR,—In connection with the very interesting discussion begun some months ago, and lately resumed in the *Academy*, concerning the proper function of the Latin *w* consonant, will you permit me to call your attention to a passage of *Velius Longus*? I quote (from Putsche, p. 2223): "V literam digamma esse interdum, non tantum in his debemus animadvertere, in quibus sonat cum aliqua aspiratione, ut in *valente* et *vitulo* et *primitivo* et *genitivo*, sed etiam in his quibus confusa haec litera est, in eo quod est *quis*."

I do not propose to attempt to point out in technical terms the scope of these words, but will venture to ask whether the grammarian, while revealing to us this his view of the different power of *w* consonant in the situations respectively described, could have used language more appropriate to Eng. *v* on the one hand (*cum aliqua aspiratione*) and to Eng. *w* on the other?

WALTER BLAIR.

Notes and Intelligence.

Syed Ahmed Khan, in the *Pioneer*, has reviewed Dr. Hunter's book, *Our Indian Musulmans*, whose views on Wahabism have lately been so much discussed by Indian newspapers. Syed Ahmed feels himself called upon to enter his protest against Dr. Hunter's opinions, which, in spite of the amicable sentiments he expressed, were calculated to do great harm to the Muhammadans. He agrees with Dr. Hunter's statement, that "Wahabism is a system which reduces the religion of Muhammad to a pure theism"; but according to the reviewer the Wahabis—or Ahal-i-Hades, i. e. believers in the sayings of the prophet—are not merely the followers of the doctrines started by Abd-ul-Wahab, but were dissenters from the four orthodox churches so named after four doctors, and established in the second century of the Hegira, viz. the Hanafi, Shafai, Malik, and H umbali; as such they had gradually become hateful to the masses, and in Muhammadan law-books were held up to the execration of the Faithful. The numerous *Futwas*

* "Emendatione in omnibus utendum erit simplici, quae unius aut alterius litterulae dispendio peragitur." (Praef. p. 8.)

† In *Theb.* 824, we have βύεσθε for βύεσθε (probably from an ancient variant βύεσθαι).

issued by various Moslem divines, at the request of their co-religionists, and deciding that the Musulmans of India were not in duty bound to rebel against the British Government, were not of modern date, but had existed for hundreds of years. "The followers of Islam in India required no fresh teaching of the doctrines and obligations enjoined on them by their religion;" but they had only deemed it necessary to re-issue those *Futwas* "when accusations of disloyalty and statements of the obligation of Muhammadans to be disloyal were becoming more and more numerous."

The subject of *Tikhd* has also lately been treated in a paper read at a meeting of the Royal Asiatic Society, by Mr. N. B. E. Baillie, and printed in the Society's *Journal*.

The publication of Littré's great dictionary continues regularly. The 26th part (Scille—Souscrire) is out; and it is announced that the whole work will be completed before the end of the present year.

Contents of the Journals.

The Indian Antiquary, ed. by J. Burgess, No. 1 (Bombay, January 1872).—Editor's introductory remarks. [This monthly journal is to be a medium of communication between archaeologists in the East and West on subjects concerning the manners and customs, arts, mythology, literature, history, antiquities, &c. of the people of India.]—On the present position of old Hindi in Oriental philology; by J. Beames. [The modern Aryan group of languages of India has been developed from the primitive Aryan by the same process as that by which the Romance group has evolved itself from the Latin. For a general study of the hitherto much neglected vernaculars of the mediaeval and modern periods printed editions of works such as Chand Bardai's Hindi epic *Prithivîrâja Râsau*, which was composed about A.D. 1200, are much needed. Complete and correct MSS., however, are very rare; and the language is by no means easy, as the early Hindi poets fall in that transitional period when the case- and tense-endings of the old synthetical system, as represented in the Sanskrit and Prakrits, had become so abraded and corrupted that they no longer suffice to distinguish clearly the relations of words, and were gradually supplanted by the system of particles, pre- or post-positions, and auxiliaries whose use constituted the distinguishing characteristic of the analytical stage.]—The *Apastamba-Sûtra* of the Black Yajurveda, and the commentaries, &c. belonging to it; by A. C. Burnell. [Of this, the most important, Sûtra of the Taittirîya Yajurveda; Mr. Burnell has at last discovered a complete MS. belonging to a Brahman in the Tanjore district, who unfortunately does not seem inclined to part with it, or allow a copy to be made. The whole consists of 30 *pragnas*: 1-24 containing the *granta* rites; 25-27 the *grihya* portion; 28 and 29 the *Dharmasûtra*; and the last the *Sukhasûtra*.]—A Legend of Serpent Worship; from Bhaunagar in Kâthiawâd; by the Ed.—Manners and customs of the Dards; by Dr. Leitner. [Accounts of the amusements, beverages, birth and marriage ceremonies, funerals and holidays of the Dards.]—A Tâmba patra or ancient copper-plate grant from Kâthiawâd, trsl. by Ramkrishna-Gopal Bhandarkar. [This is a grant of the Vallabhi king Dharasena IV., the twelfth in Anderson's list (Bombay B. As. S.'s Journal, vol. iii.). The genealogy down from Bhatârka does not vary from that given by two other plates already published; but some plays on certain grammatical terms and the name of Pânini, as *Śâlatûrya*, had been missed by former decipherers.]—On the identification of various places in the kingdom of Magadha visited by the pilgrim Chi-Fah-Hian (A.D. 400-415); by A. M. Broadley. [A solitary hill mentioned by Fah-Hian at a distance of 9 yojanas S.E. of Patna is here identified with a rocky peak at Bihâr, contrary to Gen. Cunningham's identification of it with Giriyak (*i. e.* Giri-eka). Further, the fortifications at the foot of the Baibhâr and Vipula hills, three miles S. of Bargâon (Nâlanda) are identified with Rajgir, though Fah-Hian, according to his translators, makes it one yojana W. of Bargâon.]—Pânini and the geography of Afghanistan and the Panjab; by Prof. Ramkrishna Gopal Bhandarkar. [Some proper names occurring in Pânini and his commentators are here identified with names of places, &c., as *Vallabhi*, *Ujjayinî*, *Kâpîshî* (= *Kapise* of the Greek and Roman geographers, the northernmost kingdom of Afghanistan); *Bikshoda* (= *Archosia*); *P. Varanî* = Hwan-Tsang's *Fa-la-nu* (by others identified with *Vanech* or *Banu*); *Gandhara*-country; river *Suvâstu* (=mod. *Swât*, a tributary of the *Kabul* river); *P. Varanî* = the *Aornos* of Alexander the Great (Wilson, *Āvaraya*; Cunningham, from *Râjâ Vara*); *Parshushthâna* = Hwan-Tsang's *Fo-li-shi-sa-lang-na* (*Ortospan*, the modern *Kabul*); *Sâṅkala* = the *Sangala* destroyed by Alexander; *Parvata* = Hwan-Tsang's *Pa-la-sa-to*; *Mâlavâ* and *Kshudrakâ* = the two tribes *Mâli* and *Oxydrakae*; *Shaubreyas* = the class *Sambracae* or *Sabracae*.]—Progress of Oriental Research in 1869-70. [From the Report of the Royal Asiatic Society.]—Reviews (favourable) of S. Beal's *Catena of Buddhist Scriptures*; C. E. Gover's *Folk-songs of Southern India*; Ardaseer Framjee's *Hindustanman Musafari*, or Journal of Travels in India.—Miscellanea. [Mr. Ravenshaw's *History of Gaur*; Shri Harsha, a paper

by Dr. Bühler; The Selons; Rock-temple at Harchoka; Coin of Firuz Shah Zafar; Oriental studies at Cambridge; Revision of the Sinhalese Buddhist Scriptures; &c.]

Revue Critique, Jan. 20.—A. Bergaigne reviews Benfey's essay, *Über die Entstehung und Verwendung der in Sanskrit mit anlautenden Personalendungen*.—E. Tournier gives us an elaborate and on the whole appreciative account of Voligraff's *Studia Palaeographica*, but strangely overlooks one or two important facts, *e.g.* that the book is not intended to be an exhaustive treatise on the subject, and that the author is disciple (and indeed a most promising one) of the school of Cobet, who is not once mentioned in the course of M. T.'s long article.—Jan. 27.—H. Weil reviews Brambach's *Metrische Studien zu Sophokles*, and professes disagreement with the writer on sundry fundamental points. A notice by Ch. Thurot of Madvig's *Adversaria* presents a clear and useful summary of this great work of the great Danish scholar.

Journal of Philology, No. 7.—Two Kasidahs of the Persian poet Anwarî; by Profs. Cowell and Palmer. [Edited from four MSS., with a poetical version.]—E. H. Palmer and J. E. Sandys: An Athenian bilingual inscription. [Restored from a copy recently made by P. in the Theseum at Athens.]—Prof. Grote (the late): On Glossology.—S. S. Lewis: On a bronze ram, of ancient Greek workmanship, now in the Museum at Palermo. [With a lithographic illustration.]—Notes on Exod. iii. 14, xxii. 4 (5), and xx. 4, 5; by W. A. Wright.—H. Hager: On the Eisangelia. [Maintains that *εἰσαγγελία* was correlative to a special *vōmos εἰσαγγελτικός*, in which the offences to which the process was legally applicable were strictly defined, though the provisions of the law may have been stretched to take in other cases. The greater part of the article is an attempt to reconstruct the *vōmos εἰσαγγελτικός* from statements in the Orators and elsewhere.]—D. B. Monro: On the Pedarii in the Roman Senate. [Shows that, in theory at any rate, *sententiam in senatu dicere* expresses the whole right and duty of a senator at all periods of Roman history.]—H. A. J. Munro: On some passages in Lucretius.—R. Burn: The Roman Capitol. [A reply to Dr. Dyer.]—J. F. MacMichael: On the sites of Sittake and Opis. [Contends, in opposition to Sir H. Rawlinson, that the Sittake of Pliny and Ptolemy is not the same as that of Xenophon; and that Opis is to be identified with the modern Eski Baghdad. A map accompanies the article.]—H. Jackson: On some passages in Plato. [Suggestions on the text of *Phaedr.* 235 D, *Rep.* 360 B, 390 B, 465 C, 615 D, and *Phileb.* 48 C.]—H. Richards: Notes on Aristotle's Ethics. [On *Eth. Nic.* v. 5, 12; v. 8, 10, and vii. 8, 4.]

Literar. Centralblatt, Dec. 30.—Fausböll's edition of the Dasaratha-Jâtaka; Marazzî's *Teatro di Calidasa*, and Pickford's translation of Mahâviracharita; rev. by A. W. Jan. 27.—Zingerle's *Chrestom. Syriaca*; by Th. N. Feb. 3.—Benfey's *Jubil u. seine Verwandte*. Feb. 10.—Ahlgqvist on Finnish words expressive of culture (Helsingfors, 1871).

New Publications.

- AHLQVIST, A. De Vestfinska språkens kulturord. Helsingfors.
- BACHER, W. Nizâmi's Leben u. Werke u. der 2^{te} Thl. d. Nizâmi'schen Alexanderbüches. Leipzig: Engelmann.
- CANONES Apostolorum, Aethiopice, ad fidem librorum MSS. primus edidit W. Fell. (Dissert. inaugur.) Leipzig: Brockhaus.
- DERENBOURG, J. Manuel du Lecteur, d'un auteur inconnu, publié d'après un manuscrit venu du Yemen et accomp. de notes. Paris: Imp. Nat.
- DE TASSY, Garcin. La Langue et la Littérature hindoustanies en 1871. Revue annuelle. Paris: Maisonneuve.
- EL MUBARRAD. The Kamil. Edited for the Germ. Oriental Soc. by W. Wright. Parts 7 and 8. Leipzig: Brockhaus.
- LENORMANT, Fr. Essai de Commentaire sur les Fragments cosmogoniques de Bérose. Paris.
- LIEBLEIN, J. Dictionnaire de noms hiéroglyphiques en ordre généalogique et alphabétique. 2 livr. Leipzig: Hinrichs.
- PAR PALIMPSESTORUM WIRCEBURGENSIUM. Antiquissimae vet. Test. versionis Latinae Fragmenta. E codd. rescr. eruit, edidit, explicuit Ernestus Ranke. Accedunt duae Tabulae photolithographicae. Vindobonae: Braumüller.
- PRÄTORIUS, F. Grammatik der Tigriffasprache in Abessinien, hauptsächlich in der Gegend von Aksum u. Adoa. 2. Hälfte. Halle: Buchh. der Waisenhauses.
- TRANSACTIONS of the Soc. of Biblical Archaeology. (Papers by Birch, Fox Talbot, G. Smith, &c.) Longmans.
- UNGER, R. Emendationes Horatianae. Halle: Pfeffer.
- VETUS TESTAMENTUM AETHIOPICUM, tom. ii. fasc. ii. Ad librorum MSS. fidem edidit etc. A. Dillmann. Leipzig. (German Or. Soc.)
- WEDGWOOD, H. A Dictionary of English Etymology. Second ed. Part 3. Trübner.

THE ACADEMY.

"INTER SILVAS ACADEMI QUAMRERI VERUM."

Vol. III.—No. 43.

Readers are reminded that the mention of New Books, Articles, &c., in our lists is intended as a guarantee of their importance. The Editor of THE ACADEMY cannot undertake to return communications which are not asked for. The next number will be published on Friday, March 15, and advertisements should be sent in by March 11.

The Second Volume (October 1870 to December 1871) is now ready, bound in cloth, price 15*s.* Covers may be had of the Publishers, price 2*s.*

Art and Archaeology.

Correggio. Von Julius Meyer. Leipzig : Engelmann, 1871.

THERE is no painter of the sixteenth century whose life is so completely shrouded in obscurity, or whose character, personal appearance, and surroundings, are so little known, as Correggio. Correggio lived away from the centres of humanistic teaching—away from Florence and from Rome, where the classical in letters and in art was cultivated. He spent his years in a province into which pæ-Christian influence in sculpture and architecture could hardly penetrate. He knew nothing of the early striving of the Tuscans for ideals of form and proportion, less still of the labours of the realists who startled the sixteenth century with subtleties of detail and texture. Confined to a small circle of country in which the hum of the world's business seemed comparatively hushed, he never came in contact with any of the great masters whose names were household words in the cottages and palaces of Italy. His pictures were not painted for the State nor for illustrious patrons; amongst local contemporaries none thought it worth their while to note Correggio's birth or death, or tell of his daily life, his friends, associates, or well-wishers. And yet Correggio ranks in the opinion of this and earlier generations as an artist of pre-eminent power, who, above all others of his age, transfigured homeliness into sublimity. It was Correggio who, at a period when sensualism and mannerism were on the increase, clung to the purity of nature, and depicted in its most delightful aspects the fond rapture of the mother, the mirth and glee of the child, and the eager devotion of a holy congregation. It was he who combined motion in its most daring forms with sprightliness and humour, who tempered light, and shade, and colour, to the most dazzling force and most harmonious balance. It was he who illustrated with unmatched power the true maxims of aerial perspective and chiaroscuro.

We deplore this contrast between the obscurity of the man's life and the brilliant attraction of his pictures the more as the result of it is to make a history of Correggio extremely difficult to write, forcing the biographer to oscillate between minute details in which probabilities in respect of small but relevant facts receive a dry but necessary attention, and descriptions of works in which previous sobriety is usually counterbalanced by an excess of colouring. If under such adverse circumstances as these Dr. Meyer has produced a book alike interesting, varied, and full of tone, it is much to his credit. There is no biography of Correggio that can be pointed to which contains so fully and exhaustively all that has been preserved and written of the master; none which

VOL. III.—NO. 43.

gives with more graceful picturesqueness an idea of his qualities and defects. With praiseworthy conscientiousness, the legends which have been told of Correggio's life and education are examined and reduced to their real value. The critical opinions of this and earlier generations in respect of his style are set before us; then comes such news as can be gathered directly or indirectly as to the painter's youth, his teachers, and those whose example was of influence in the expansion of his genius. Interesting chapters follow in which the frescoes and canvasses in Italy and elsewhere are described; and an essay at the close explains the character and significance of Correggio's art. Appended to this—the main body of the work—is a descriptive catalogue of all pieces genuine or not, of all drawings and engravings, under Correggio's name.

That in a field so vast and so closely sown with difficulties, criticism should not be able to find fault, was not to be expected; and Dr. Meyer's life of Correggio is not without conclusions to which we may demur, and not without statements requiring modification or correction. It may be well, however, to confine ourselves to a few salient points.

In the third chapter, which treats of Correggio's youth and education, countenance is given to theories which almost invite dispute. We are told that Mengs was probably right in thinking that Correggio had lessons from Francesco Bianchi Ferrari of Modena, because there are pictures by that artist in the galleries of Paris and Modena which bear the impress of an art similar to Correggio's in the Madonna of St. Francis at Dresden. Yet there are local masters of the school of Parma whose manner is more closely related to Correggio; and no one as yet has ventured to include them in the list of those who influenced Allegri. To start from such uncertain premisses, and build upon them as if they were sure foundations, is more than venturesome; for there is no better ground for thinking that Allegri wandered to Modena than there is for believing that he moved to Parma. We have to remember that Ferrari was an artist of very low power, who died in February 1510, when Correggio, on the most favourable computation, was barely sixteen years old; and, as regards Correggio himself, we know that he was residing in his native place as late as January 1511.

Greater force may be conceded to Dr. Meyer's view, accepted years ago by Pungileoni, that Correggio spent a certain portion of his youth in Mantua, where he acquired the taste for foreshortening and the style of architectural adornment peculiar to Mantegna; but it might also have been borne in mind that the principles of Mantegnesque art were widely diffused throughout the cities of the valley of the Po; that they were quite familiar to the Modenese through the medium of the Canozzi; that they were known to the Loschi, Mazzola, and Christophoro Caselli at Parma; and it might have been thought worthy of remark that Caselli's style, like Correggio's, was affected at different periods by Venetian and Paduan elements. In his early years a disciple of the Canozzi and Montagna, Caselli modified his manner by contact with Cima; and there is an altarpiece of 1499 bearing his name in Parma which gives us quite a foretaste of Correggio in the mould of the faces of angels, and the peculiar mild diffusion of twilight on flesh which characterizes Allegri's earlier productions. It is very probable that Dr. Meyer has underrated the importance of Parma as a place in which Correggio might study new forms of art. It was a city famous at the opening of the sixteenth century for the pictures which Cima painted there. These pictures were of a character to suggest to a young and rising artist the charms of polish, of balanced chiaroscuro and subdued silvery tone; and they might have led Correggio to acquire those delightful blended modulations of light and

shade which so many critics, including Dr. Meyer, ascribe to Leonardo. There are two artists of Central Italy in whom the influence of Da Vinci has been considered to have been markedly displayed; these are Correggio and Lotto; and yet no one can prove that they ever met or came in contact with Leonardo. Correggio and Lotto, it is interesting to observe, were alike in many respects. They were alike in their fondness for Leonardesque polish and finish; they had the same spirit in composing groups of gleeful angels, the same feeling for tenderness in the attitude and movement of saints, the same smiles and dimples, and similar ideas as to the application of the laws of light and shade. It is not to chance, we should think, that this coincidence is due; and it is not at all unlikely that Correggio at some period of his obscure career witnessed the striving of more than one Venetian craftsman to rise to mastery and eminence. We may believe that it will be possible to the future student of Correggio's life to lay down that Correggio was no stranger to Cima, to Palma, Lotto, and Pordenone; and critics may be invited to observe how many of the elements which make up Correggio's style are to be found in the works of all the Venetians above named.

In the effort to preserve a rigid chronology, Dr. Meyer is not always able to trust to his own observation; but finds it both convenient and necessary to call to his aid some brother critic upon whose opinions he carries up his own edifice of historical induction. It is, perhaps, needless to point out the danger of such a course as this. The fact is that it creates inequalities almost as startling at times as a later interpolation might be. Had Dr. Meyer seen the "Madonna with Saints" which so long adorned the collection of Bath House, he would perhaps have agreed with those who believe that "Madonna" to be a copy. He certainly would have paused before he assigned to a cold and ill-favoured picture the same date as the soft, and delicate, and supremely beautiful "Marriage of St. Catherine" at the Louvre.

Finally, Dr. Meyer may learn to distrust the sources from which *original* records are derived when he hears that the contract for the celebrated "Nativity" at Dresden which he prints is not derived from an original text, but from a copy of the original recently discovered in the archives of Modena.

CROWE-CAVALCASELLE.

THE EXHIBITION OF PICTURES BY OLD MASTERS.

II.—ITALIAN, SPANISH, FLEMISH, AND DUTCH SCHOOLS.

WHETHER the so-called "sketch" of "La Gloria" (No. 114, contributed by the Duke of Cleveland) is actually by the hand of Titian is somewhat doubtful, but its intrinsic merit and the importance of the great masterpiece which it represents would in any case justify careful examination and discussion.

Titian's finished picture, now one of the chief treasures of the Madrid Gallery, is a great altar-piece about four times the size of the present example. The picture now being exhibited was, I believe, formerly in the collection of Mr. Rogers, the poet, and was sold at Christie and Manson's in 1856: in the sale catalogue it is stated to have been discovered in a gambling-house at Madrid, and to have been purchased by M. de Bourke, afterwards Danish minister in London. From M. de Bourke it passed through the hands of Wallis, a well-known dealer of the early part of this century, to Mr. Rogers. Probably no other world-renowned picture is really so little known to lovers of art as the masterpiece in question: the fact that the original picture was sent to Spain almost immediately after its execution in Venice accounts for the paucity of reproductions of it, whether as copies or engravings. It is true that a fine engraving of the composition was made by the Italo-Flemish engraver Cornelius Cort (in 1566, shortly after it was painted), but that engraving is scarce, and I am not aware that any other print exists. It would

of course be most interesting to compare the engraving, the present "sketch," and the original picture together, and as the latter has been recently photographed in Madrid, this is now substantially practicable; some instructive evidence would doubtless result; I have not however had time or opportunity to make this comparison with a view to my present task.

The work now in question is called a "sketch," and it is doubtless assumed to be a first study for the great picture, but it would perhaps be better to designate it by the convenient term "replica," for as far as my recollection of the finished picture serves me, the two are substantially identical both in composition and colour, which would scarcely be the case if this were really a preliminary design.

In determining this point the fact should be noted that it was not the custom of the Italian painters of Titian's time to make small preliminary sketches in colours: that practice seems to have arisen in another age and school; it was perhaps mainly stimulated and established by Rubens and Vandyck; but copies or sketches from pictures already completed, on a smaller scale and sometimes with variations of design arising from after-thought, were doubtless made at all times and in all schools, often by the authors of the original works themselves. The picture before us then may, I think, safely be deemed one of these after-copies or "repliche," but the important question as to when and by whom it was executed remains to be solved. That it is an excellent reproduction of the finished picture is certain, and there is nothing in the general "technique" inconsistent with the supposition that it is of contemporary date and either by Titian himself or some talented Italian scholar; but at the same time there is perhaps an equal probability that it may be the work of an able Spanish copyist of the sixteenth or seventeenth century; the best criterion, the evidence of the "touch" or "execution" of the painter—his handwriting, so to speak—can unfortunately no longer be relied on, for the surface of the picture has been too much defaced and obscured by the results of neglect and ill-judged "restoration."

We have at all events now before us a fair representation of one of the most celebrated historical pictures ever painted—yet "La Gloria" is not one of Titian's finest performances; it was a commissioned work, and the soul of genius always rebels against stipendiary employment; in reality this great picture may be taken as the first of a declining series of official productions successively executed by the great painter for the Emperor Charles V. and his son Philip II., under the terms of his service as court painter; many of these works are still preserved at Madrid, and one after another, in the order of their production, they clearly display the deadening aspiration, the failing powers, the indifference and carelessness of advancing age.

Still, in spite of many drawbacks and even absurdities, "La Gloria" is worthy of its title, whilst nothing can be more interesting than the facts of its production; there can be no doubt that it was ordered of Titian by Charles V. when he first resolved to abdicate and retire from the world; the subject of the picture in fact symbolises that retirement in a manner which is even crudely obvious. The emperor evidently wanted an altar-piece for the church of the monastery of Yuste, where he had determined to end his days, which should perpetuate the memory of his sojourn there.

How far Charles himself prescribed the exact subject and ordonnance of the work is uncertain; whether even this mighty and arrogant monarch would have directed his painter to represent himself and his deceased queen in Heaven, being presented to the Almighty Father by all saints and patriarchs in celestial court assembled to that end, much in the same manner as he would have caused any grandee and his consort to be presented to him in his own sublunary court, seems very doubtful. There were veins of melancholy sentiment, of poetry even, in the heart and mind of Charles which rather forbid the supposition that he himself prescribed to Titian the exact composition of this picture. Surely had he done so, the wife he had loved, and whose memory he cherished in his last days more dearly than ever, would have been seen amongst the blessed souls, eagerly rushing forward to welcome her earthly consort, not, as it is, kneeling in a secondary place behind him, as if both had made their advent in Paradise together. In truth, there is as little poetry as common sense in the design and arrangement of the work, and whoever is responsible for the conception—perhaps some Spanish friar—it is in reality one of those strange sprawl-

ing "sacre conversazioni" such as Correggio first depicted in his Parma frescos, rather to the amazement of his contemporaries, which Michel Angelo in some degree, nevertheless, repeated in his "Last Judgment," and which, at a later period, Tintoretto finally carried to the utmost limits of absurdity.

Ticozzi has shown that "La Gloria" was already completed in 1554, and Charles did not retire to Yuste till 1556; it is quite certain that the picture was fixed in its place during the emperor's lifetime; and it is on record that Philip II., after his father's death lost no time in bringing it back to Madrid, together with the entire museum of art-treasures with which the emperor had surrounded himself in his retreat. The important fact of the date of the work is thus ascertained with sufficient approximate certainty.

The subject of "La Gloria" in great measure dictated the scheme of colour and light and shade—it displays, in fact, a blaze of supernatural golden light, in which the numerous foreshortened figures are upheld and immersed as if in a sustaining medium; the local colours of flesh, draperies, and accessories being all alike vivified and illumined with a degree of splendour never before achieved, and perhaps never since surpassed by mortal pencil.

It was perhaps a concession to Spanish religious symbolism which led Titian to clothe the three divine personages in the upper part of the picture, in massive ultramarine blue draperies; as it is, both in the present "replica" and in the Madrid picture, these figures have become rather obtrusively prominent, "telling" somewhat too much as dark spots on the brilliant background; it must be borne in mind, however, that this discordance is mainly owing to the fading of the light warm tints of the background, whereas the ultramarine pigment, being absolutely unchangeable, has acquired greater relative force of tint.

It is well known that in after-time the Spanish church painters' guide, *El pintor eruditó*, of Padre Ayala, prescribed this colour as the fittest emblem of the purity and holiness of the highest celestial beings. There is little doubt in any case that an entire cycle of Spanish religious pictures—the radiant blue-draped Madonnas, mounting to the skies, surrounded with angels and cherubs, the "Virgens de la Concepción" of Alonso Cano, Velasquez, and Murillo—had in great measure their antetype and model in this particular picture of Titian.

It is a fortunate coincidence that the replica of "La Gloria" should have been exhibited on the same occasion with the "Europa" (No. 126), belonging to Sir Richard Wallace, for it is evident that the latter most exquisite picture was painted at about the same period of Titian's career, and in the same style and spirit.

There exists a larger picture of "Europa," by Titian, now in the possession of Lord Darnley, at Cobham, but formerly in the Orleans Collection. It was exhibited some years ago at the British Institution in Pall Mall. From my recollection of that picture I believe it to be a later work than the present, and it is painted in a much lower tone; in fact, a comparatively dark picture, like the "Diana and Actæon" in this exhibition, next to be described. The present most admirable treasure of art was purchased for the late Marquis of Hertford, at a sale at Christie's, some years ago, for a few hundred pounds only. It is another of those unique and priceless works which should have been acquired at any cost for the National Gallery, and which it is almost a crime in those concerned to have overlooked. I have a vivid recollection of having somewhere long ago seen a study from this very picture by the hand of Rubens—a rapidly executed black-chalk sketch on paper, but touched or slightly tinted in parts with colours—evidently added by Rubens as memoranda, the more certainly to impress on his mind the ineffable vision of glorious light and colour which entranced him.

Although not directly relevant to our present review, I may say that amongst the rich veins of that only half explored art-mine—Spain—an especially interesting one is the evidence of the influence which Titian's masterpieces in that country exercised on Rubens. The prince of Flemish painters bent the knee to the great Italian. Side by side at Madrid may be seen two pictures—and the critical student who has not yet seen them has still to profit by one of the most striking and instructive technical lessons in art; these are Titian's great picture of "Adam and Eve in Paradise" and Rubens' free copy of it, of the full size. Rubens is there seen as it were grafting himself on Titian, and

endeavouring to improve on his model. Titian perhaps would have lauded the result, but I am disposed to think that Rubens would have admitted his own failure!

(No. 73) "Diana and Actæon," contributed by Earl Brownlow. This is a fine representative picture of Titian's late period—a grand, massive, sombre work, full of poetic feeling, weak in some respects, yet in others most powerful—the production, as it were, of a waning giant. The great predominance of the picturesque landscape element in this picture, and the comparatively slight and careless drawing and execution of the figures, illustrate the tendency which seemed to grow on Titian with advancing years, to neglect and underrate the more severe characteristics of form or design in favour of what may perhaps be termed the emotional qualities of colour and artificial chiaroscuro.

Titian had undoubtedly a special bias towards landscape painting—he may, indeed, almost be deemed the creator of that art as a distinct branch. If the Royal Academicians could next year obtain Her Majesty's permission to exhibit the splendid Titian landscape in the Buckingham Palace Gallery, where it hangs half concealed in a dark corner, they would render a greater service than by displacing whole rows of pictures from Windsor or Hampton Court, where they can be seen by everybody just as well as at Burlington House. Furthermore, in passing, as we are about to concern ourselves with Velasquez, I recommend at the same time to their notice a superb portrait of the young prince of the Asturias, son of Philip IV., of whom more anon, one of the little known treasures of the same royal residence; the latter picture occupies a place in one of the lower rooms of the palace, and its existence even is unknown to the mass of lovers of art. The exhibition of these pictures, especially the former work, would be a great lesson and a powerful rebuke to the present generation of "pre-Raphaelite" painters. Such pictures, moreover, are the true antidote to the great bane of modern landscape art photography!

The "Diana and Actæon" belonged at one time to Christina, queen of Sweden, and it afterwards passed into the Orleans Gallery, which famous collection numbered upwards of twenty pictures of Titian. It was purchased at the sale of the Orleans pictures in London for 200*l.* by Sir Abraham Hume, who was the author of a *Life of Titian*.

Nearly all the Orleans Titians are doubtless still in this country, and to ascertain the present whereabouts of the several specimens, and to get them together again on some such occasion as the present, is just the kind of work which the public expects the Academy to take in hand.

I cannot quit the great Venetian masters without digressing again, to put on record the fate of another picture—a masterpiece mentioned by Vasari and most of the subsequent illustrators of the life and works of Titian. Besides the well known and beautiful little picture representing Christ appearing to Mary Magdalene in the garden after His resurrection, now in our own National Gallery, Titian painted a large picture of the same subject, the figures in which were of the size of life. This was done for Philip II., and a letter from the king to Titian respecting it is still extant, from which it appears that the work was finished and ready for delivery in 1561. That picture, though known to have been sent to Spain, has been long missing; in truth, alas! it has been destroyed, yet not entirely, for a fragment of it—the head of Our Saviour, cut out of the panel—still exists; and as a further compensation, a copy—though a very bad one—of the entire composition is also extant. These were brought to light again in Spain by myself, some years ago, and as an illustration of what may happen to the sublimest works of human genius, I will briefly relate the circumstances of their discovery.

On the occasion of a visit of exploration to the Escorial, I noticed the copy in question hanging exposed to the outer air in one of the interminable corridors of that vast edifice; a single glance sufficed to show me that it represented a picture by Titian—the lost work, in fact; but my delight was greater when, at the same time, I recognised in the head of the Saviour the copy of an original head by Titian, hanging in the gallery at Madrid. A close inspection of the latter immediately afterwards, at once revealed the fact that it was a fragment evidently cut out from a larger work. On communicating my discovery to the director of the gallery, that eminent and estimable person informed me that his father, and predecessor as

director, Don Pietro Madrazo, had himself many years before discovered and rescued this fragment from destruction at the Escorial, where it then served as the cover of a "tinaja"—or large oil jar—having been evidently treated by the monks as a piece of ordinary board!

From Titian to the Spanish school is a proper and orderly transition. The present gathering is not rich in Spanish pictures; but it comprises, nevertheless, several important works of the greatest masters of the school. It would be an interesting task to show more in detail the direct influence which Titian undoubtedly exercised on Velasquez, Alonso Cano, and Murillo; time and space, however, are not sufficient for the purpose, and it must suffice to indicate the fact, to which, moreover, I have already alluded, that the royal collections at the Escorial and at Madrid were the chief sources of instruction, and contained the great precedents which mainly contributed to form the style of those pre-eminently national and untravelled painters, and that Titian was undoubtedly their principal model.

Josef Ribera, called Il Spagnoletto, comes first in order. The works of this master are so numerous and so well known that I should not have noticed the one capital picture by him in this exhibition (No. 97), the property of Mr. T. Baring, M.P., were it not that it is a somewhat exceptional work. Ribera carried out and continued to another generation the technical processes and very characteristic style of his Italian master, Michel Angelo da Caravaggio, and everybody is familiar with his dark, powerfully painted pictures. Here, however, we have a lightsome silvery picture, and at first glance it might rather be taken for the work of a celebrated Bolognese contemporary, Guido Reni, than of Spagnoletto. There can be little doubt, in fact, that the picture was executed in direct imitation of the new manner of the former artist. Guido was born thirteen years earlier than Ribera, and he had, at an earlier period than the latter, adopted the dark, violent manner of Caravaggio, but he afterwards abandoned the dark style, and painted in a manner in many respects entirely contrary—one, in fact, eminently clear, light, and "silvery."

This phase, then, seems to have exercised a passing attraction on Ribera; but it could only have been a temporary influence, for his lightsome pictures are very few in number, and they were probably executed early in the career of the master, and it would seem that he relapsed again into his original sombre style, and ever after continued faithful to it.

Velasquez, on the other hand, upon whose early essays both Caravaggio and his countryman Ribera exercised a strong influence, began as one of the "Neri," or dark painters, but steadily, with advancing powers, emancipated himself from it, adopting instead, like Guido, a clear and lightsome manner, which increased in brilliancy and vivacity to the last. There are two important works of the king of Spanish painters, Don Diego Velasquez y Silva, in the exhibition, both contributed by Sir Richard Wallace: No. 142, absurdly called in the catalogue "*Portrait of the Infanta*," and No. 75, equally stupidly entitled "*A Spanish Infanta*." Now the first of these pictures is a portrait of the "*Infante*" Don Balthazar Carlos, prince of the Asturias, son of Philip IV., when about a year and a half old, and the last-named is that of an unknown Spanish lady. Velasquez painted the young prince over and over again; there is, indeed, perhaps no better known historical portrait than that of this child, who died at an early age. It must be clear to everybody that the picture represents a boy, and not a girl. As regards the other picture, the different members of the royal family of Spain during the life of Velasquez were so few in number, and their portraits so well known, that there would not have been the slightest difficulty in identifying the lady if she had really been an Infanta of Spain—that is, a member of the reigning house.

The latter portrait is that of a good-looking Spanish lady of mature age, and doubtless of noble birth: she has no resemblance to either of the wives of Philip IV., and there is not the slightest trace of the family likeness stamped so unmistakably on the face of every descendant of Charles V. Not, however, that the Academicians who made the catalogue troubled themselves in any way about this matter; it is clear that they were utterly ignorant, careless, and indifferent—ignorant alike of any tincture of knowledge of languages, or they would have known that an *infanta* meant a female, not a male, personage; of the history of Spain, and of the career and works of Velasquez in particular. This is really too full a measure of ignorance in the

members of an Academy which, if I mistake not, numbers a secretary for foreign correspondence and a professor of history amongst its officials!

As regards the portrait of the little "*infante*," the child is evidently only just able to stand alone; it may thus perhaps be the picture alluded to by Sir William Stirling Maxwell, in his *Life of Velasquez*, as the first work which the painter executed after his return from Italy in 1631, the young prince having been born during his absence of about a year and a half.

The picture is somewhat darker than the other works of this particular period of Velasquez, and the influence of Ribera, especially in the "handling" of portions of the work, is still perceptible, but the admirably facile yet most truthful execution pertaining to Velasquez alone—that power of expressing, with a few magical touches and loose strokes of the brush, delicate and refined passages of form and texture, to the rendering of which other painters would have patiently devoted hours or even days of labour is yet everywhere visible.

The portrait (No. 142), also the property of Sir Richard Wallace, that of a thoroughly typical Andalusian lady—"petite," short of stature, not beautiful, but yet graceful and attractive—has been for years confounded in my mind with real, living, individuals of her race. To my imagination she is the same lady who sat next to me at the first bull-fight I witnessed in Spain, when the gentle, regular waftings of that very fan never ceased or varied all the time, whilst I hid my face, and dared not look at the cruel horrors going on before me. Again how often have I seen her with that very rosary at early mass. The clear, rose-tinted complexion of this lady suggests to my mind that she must have been a Granadine belle; however, there is absolutely nothing known about her, but that she lived and died, and had the good fortune to have been painted by Velasquez.

The picture came from the collection of the Spanish banker, the Marquis Aguado, sold in Paris twenty or thirty years ago, and it is well known by more than one engraving executed from it. It was probably painted some years after the other picture.

There is but one important work of Murillo in the present exhibition (No. 98), the "Charity of Saint Tomas of Villanueva," contributed by Sir Richard Wallace. Murillo painted many pictures representing the actions of this local saint of the Seville district, and they are amongst the most interesting and beautiful of his productions. They afforded scope for the portrayal of the men and women of Spain as they existed around him, and as the present generation still live, but little changed—the peasants and beggars, clad in the universal "pafio pardo" of russet-tinted Spain; the idle melon-munching "muchachos" of the streets; the half-naked children; the women with lustrous eyes gleaming beneath their dark mantillas; the dark, smooth-cropped priests. At an hour's notice any time the streets of Seville would still furnish materials for a *tableau vivant* the very counterpart of this fine picture.

This work belongs to the mature period of Murillo, when he painted firmly and solidly, with a practised hand and with perfect mastery of all technical resources. Those who are acquainted with the entire cycle of his works, and especially with his pictures at Seville, will discern in it traces of the external influences which still exercised lingering sway over this most national and original painter; reminiscences of Velasquez, Vandyck, and Pedro de Moya; but the mass of picture-lovers will see in it only the pure genius of Murillo. This picture is, indeed, an excellent typical example of its class and period, which was that of transition from the earlier dark manner of the master to that of his ultimate characteristic style. It offers, however, few evidences of the "*estilo vaporoso*," or of the colours blended with "*leche y sangre*" which have always been the delight of the art amateurs of his own country.

No. 104, "Moses in the Bulrushes," according to the catalogue ascribed to Murillo, and the property of the Duke of Devonshire, has nothing whatever to do with the great Spanish painter, nor indeed with any other Spanish master. It is, on the other hand, evidently an Italian picture of the second half of the seventeenth century, and although an excellent work of art, not with certainty to be ascribed to any particular master. I have an impression that it may possibly be the work of Andrea Sacchi; it is at all events clear that the authorship has always been considered rather uncertain, for there exists a last-century engraving of the picture in which it is ascribed to Vandyck;

it is, however, as little like the work of Vandyck as that of Murillo.

No. 93, by Francisco Zurbaran, is a good example of a limited special class of subjects within which a second-rate master almost achieved real excellence. This picture, which has the interesting peculiarity of being fully signed and dated (1639), was one of the pictures collected in Spain by Baron Taylor for King Louis-Philippe, and which during his reign formed the "Spanish Gallery" of the Louvre. It was there a "pendant" to the very similar but superior picture now in the National Gallery; both were purchased at the sale of Louis-Philippe's pictures at Christie and Manson's.

The Flemish and Dutch pictures form the great bulk of the present exhibition, and there are many admirable works which well deserve careful note and description, but time and space will only allow me to make a few hasty and discursive allusions. Amongst the greatest masters, Cuyp, usually so well represented in this country, is less so this year than on the two previous occasions; there is, perhaps, no really first-rate specimen—the large "Landscape with Bridge, Figures, and Cattle" (No. 157), contributed by Mr. Bond, though certainly an important specimen verging on the best period of the master, is somewhat eclipsed by the larger repetition of the same composition in the collection of the Marquis of Bute. Rembrandt also does not dominate so powerfully this year, yet the two large pictures, portraits of "Jan Palekan (?) and his Wife and Children" (Nos. 90 and 101), are very important as specimens of the style and "technique" of the early period of the great master. What can possibly have moved the managers of the exhibition to exhibit the flagrant copy (No. 68—portrait of an old woman called Rembrandt's mother), belonging to the Earl of Hopetown, passes comprehension; the well known and most certain original of that picture hangs in the National Gallery. It was, indeed, rumoured in art-circles, at the time of the purchase of the latter from Lady Eastlake, three or four years ago, that a well-known member of the Royal Academy disputed the fact of its genuineness, maintaining that Lord Hopetown's picture was the real and veritable original; it is to be hoped, now at all events, that the authority in question has recognised the fact that the late president of the Royal Academy knew more about ancient pictures than he does. In all probability the copy now being exhibited was executed during the period when the National Gallery picture was in the collection of Mr. Wells, of Redleaf.

There are several admirable works by Vandyck, the two most admirable portraits of Philippe Le Roy and his wife (Nos. 134 and 128), contributed by Sir Richard Wallace, which in the first edition of the Academy catalogue were ridiculously described as the portraits of "Philippe le Roi," and portrait of "the Queen of Philippe le Roi," are too well known to need further illustration. A really important contribution has been made by the Earl of Hopetown in the admirable portrait of the Archduchess Isabella Clara Eugenia, Governess of the Netherlands in her widowhood (No. 64).

With the exception of the two glorious landscapes by Rubens the "Rainbow Landscape" (No. 125, Sir Richard Wallace), and No. 195, "The Watering-place," lent by the Duke of Buccleuch, the great Flemish master is weakly represented.

The beautiful portrait, ascribed to Rubens (No. 59, belonging to Earl Brownlow), is most certainly a fine work of Vandyck, executed shortly before he came to England.

One of those services which the Academy should specially endeavour to render is exemplified in the having obtained for exhibition the series of admirable Dutch and Flemish pictures belonging to Mrs. Charles Cope—this most welcome "envoi" is a striking instance of the wealth of this country in works of art of the very highest class, all but unknown to the majority of lovers of art. Probably no finer or more precious work of the master exists than the exquisite "François Mieris" (No. 194) or the "Jan Steen" (No. 197). Two other notable pictures from the same source, works of exceptional excellence, though by masters of secondary rank, are the "Asselyn" (No. 65) and the "Van der Meulen" (No. 84).

Mr. T. Baring's beautiful picture ascribed to Job Berkheyden (No. 177) is a treasure unequalled in its speciality. The owner, however, must have overlooked the fact that the picture is in reality signed by Gerard Berkheyden. It was doubtless mainly painted by the latter, but in all likelihood the beautiful figures were introduced by the other and more talented brother.

I have space for only one more notice; it is that of the portrait, by Holbein (No. 32), belonging to Mr. Millais, R.A. If the pictures contributed to the present exhibition by Mr. Millais' colleagues in the Academy had all been as genuine and as important as this, the best thanks of the public would have been due to them, but as it is, some of the most worthless things in the collection have been contributed by them.

Mr. Millais' picture attracted much attention at the recent Holbein exhibition at Dresden, and it is unquestionably an authentic, well-preserved, and important work of the master—all the more interesting inasmuch as it has only recently been brought to light.

J. C. ROBINSON.

THE TEMPLE OF DIANA AT EPHESUS.

SINCE the notice of Mr. Wood's discoveries in the *Academy*, vol. ii. p. 370, considerable progress has been made by him in clearing the site of the temple. He recommenced his excavations at the end of September last, the earliest period when work could be resumed with safety on a site so subject in the summer months to malaria fever. Mr. Wood calculates that at the beginning of this month he had cleared about one-third of the whole area of the temple. The depth of soil over the site is upwards of twenty feet, so that the excavation will necessarily be a long and costly undertaking. Mr. Wood thinks that he has traced part of the line of the inner row of columns and *cella* wall on the south side, and there seems to be ground for believing that the intercolumniations of this row were 17 feet. Until, however, a much larger area has been cleared, and the water, which now in the winter months rises to four feet at the bottom of the excavation, has been drained off, no exact knowledge of the plan of the temple can be obtained.

The architectural marbles found up to the present date consist of portions of bases of columns, portions of capitals, and many drums. The cornice and architrave have nearly disappeared, and as yet there is no trace of a frieze either plain or sculptured. Pliny, as is well known, asserts that 36 out of the 127 columns of the temple were *cælata*, "sculptured in relief," a statement which has been a needless stumbling-block to commentators. Mr. Wood has discovered fragments of several drums from these *cælata columnæ*, and portions of pilasters, also sculptured in relief. Of these the most important is a drum next the base, on one side of which the figures in relief are very well preserved; on the other side the relief has been completely broken away, probably by the great weight of this drum (upwards of eleven tons) when it was overthrown.

The figures still preserved on this drum consist of a group of male and female figures, probably Olympic deities. A naked male figure, with the *petasus* hanging from his back, the *chlamys* twisted round his left arm, and a *caduceus* in his hand, is clearly Hermes. He stands looking up as if addressing or listening to a female figure who stands in front of him. Her drapery, a talaric *chiton* and *peplos*, would be suitable for either Hera or Demeter. Her head is unfortunately broken away. On the left of this female figure is a naked female figure, winged, and girt with a sword, who can hardly be other than Victory. On the right of these figures, i.e. behind Hermes, is a group of a draped female figure standing, her head broken away, at her side is the lower half of a draped figure seated, which appears to be male. The standing figures in this composition are six feet high; the sculpture varies in projection, but may be termed high relief. The composition of the draperies is good, but wanting in originality; the figure of Hermes rather too naturalistic, with a want of refinement in the modelling and somewhat ignoble in the *pose*. The same remarks apply to the Victory; and the shortcomings in the anatomy and general carelessness in the execution of both these figures remind us of similar defects in the treatment of figures on the coins of the Seleucidæ and other kings of the Macedonian period. If, however, regarded as *sculpture*, these reliefs will not bear the test of the highest standard of criticism; they appear to be admirably calculated for their purpose as *architectural decorations*. If, as there seems reason to believe, every drum of the 36 *cælata columnæ* was adorned with reliefs, and if these columns were 60 feet high, a richness of effect unexampled in Greek architecture must have been attained, which Phidias might perhaps have pronounced barbaric, but which was in harmony with the Oriental tendency and exaggerated proportions and gorgeousness of ornament which characterized

the Greek art of the Macedonian period. Fragments of reliefs on pilasters, corresponding in proportions with those of the drums of columns, have also been found, but it is as well to reserve the description of these till they arrive in England, with the rest of the cargo of marbles shipped by Mr. Wood on board H.M.S. *Caledonia* last month. This cargo will probably be sent on from Malta very shortly.

The architecture of the temple of Diana is, as might have been expected, Ionic, and very similar in character to that of the Temple of Apollo at Branchidæ, which was probably of the same date. With the exception of the fragments of *cælata columnæ* and pilasters, no sculptures have been found on the actual site of the temple except such very small fragments as to lead us to fear that the Byzantine Christians, who evidently used the temple as a quarry, smashed up its statues with an iconoclastic thoroughness which left nothing for subsequent barbarians to destroy.

C. T. NEWTON.

THE ORATORIO CONCERTS.

IT was pleasant to find the "Oratorio Concerts," after so long an interval, again proclaiming their *raison d'être* by such a performance as that of Bach's *Passionsmusik* on February 20; in the presence, too, of so large and sympathetic an auditory. The inevitable imperfection of the earlier performance of this work in England—inevitable not so much from its absolute difficulty as from the novelty or strangeness of its style to English musicians—might have postponed for an indefinite period the ultimate acceptance of one of inferior order. On the *Passionsmusik* the effect of these essays has been altogether different. The attention of thoughtful students has been continually directed towards it. Favoured by the recent accessibility of copies, singers and players whose consideration formerly was limited to their own "parts" have learned to know the work as a whole; and hearers, like performers, in becoming familiar with, have become reconciled to much in it that once seemed to them ugly or uncouth. Nothing seems now wanting but more frequent hearing to give *The Passion* of Bach a place in the hearts of the English people beside that of *The Messiah* of Handel.

Mr. Joseph Barnby, following in the track opened out by Sir W. Sterndale Bennett, has certainly done his utmost to bring this about. The performance on the 20th ult., under his direction, was incomparably the best that has yet been given in England—a performance (the first of which this could fairly be said) correct as well as hearty enough to have enabled an intelligent amateur, hearing the work for the first time, to form a fair estimate of its merits. The principal solo parts were assigned to Madame Cora de Wilhorst, Miss Julia Elton, Mr. Edward Lloyd, and Herr Stockhausen. To the ladies may be awarded the credit of good intention and careful study; to the gentlemen something—indeed, much—more. Mr. Lloyd sustained his arduous part, consisting almost exclusively of recitative and *aria parlante*, bristling with difficulties physical and musical, with words which *must* be spoken, on notes at the top of the voice, separated by intervals often the most ungainly and unexpected,—most admirably. Herr Stockhausen is never heard to such advantage as in sacred music of the highest class, on the interpretation of which he brings to bear vocal aptitude increased and refined by careful training, an acquaintance both extensive and close with music of every epoch, nation, and quality, and general culture not common among those of his absorbing profession. The highest and rarest quality of an interpreter is just expression, impossible without deep and intense feeling. The depth and intensity of Herr Stockhausen's are in no way so clearly proved as in the reticence by which he governs its expression on the greatest occasions. Those who remember—none who heard it can have forgotten—his delivery of the only one of the Divine Sufferer's last utterances with which Bach has ventured to deal, will thoroughly appreciate my meaning.

In comparison with the enormous mechanical difficulties with which the performance of much contemporary music is accompanied, those of the *Passionsmusik* might not seem to demand special consideration; on the contrary, though of a different kind, they are still considerable. Both the instrumental and vocal parts are deficient in that form, the boldness and symmetry of which so greatly facilitate the realisation of most modern music, and even of the music of many of Bach's predecessors as

well as contemporaries. It can never be argued from one of his passages what the next will be, or even from the beginning of a passage how it will end. Their execution, therefore—their reading at least—demands, if not a great, an unintermittent strain on the executant's attention. For the first time in my recollection, band and chorus, under Mr. Barnby's latest guidance, trod the intricate mazes which the ruthless old John Sebastian had prescribed for them, not merely with unswerving, but apparently unhesitating, feet.

Having said thus much, I will touch on two or three matters in which I think their performance might have been better. In the first chorus, "Come, ye daughters," the chorale, "O thou begotten Son of God," was, even with one's eye on the notes of it in the score, nearly inaudible. As Mr. Macfarren has shown in his admirable essay prefixed to Messrs. Novello's edition of *The Passion*, this and other melodies incorporated in Bach's works were, and indeed still are, familiar to the people of Germany; and there can be no doubt that the great composer calculated on the congregations who might "assist" at their presentation lending their voices to add to the intensity of these melodies. Congregational singing all the world over is and always has been in octaves; men and women uttering in their natural registers the same progressions in the same key. It is to be hoped, therefore, that in the next performance of *The Passion*, Mr. Barnby, or it may be Mr. Done—for the work, I rejoice to hear, is to be performed at the next Worcester Festival—will not be withheld by any pedantic or superstitious veneration for Bach's score from carrying out Bach's very obvious intention, even if need be in some new way; either by reinforcing the sopranos to whom the chorale is assigned by as many tenors, or by brass instruments. Perhaps both might be employed with good effect. Having counselled one seeming innovation, I have to protest against a real one—the singing by Mr. Barnby's choir of the chorales without accompaniment, and indeed the altogether too sparing use of "the sacred organ" throughout his performance of the work. It is needless in this case to call into court tradition, whose evidence would be irrefragable. That of the score is still more emphatic. To every chorale in the Leipzig edition express directions are attached concerning the instruments by which the several parts of it are to be accompanied: "viol 1^{mo} col sop 1^{mo}," and the like. Moreover the basses are, throughout the work, figured; and figures added to basses, it need not be said, represent notes. Why are these notes omitted in performance rather than any others? Mr. Barnby can hardly be moved to their omission by the small desire to show how cleverly his choir can do without them. Nor can he think that Art is served by turning these Titanic expressions of the most tremendous event in history into pretty part songs. The finical gradations, the obstreperous fortés, and the all but inaudible pianos, for the exhibition of which the organ is mute during these chorales, are of themselves heresies unknown to ancient practice; in any case they are altogether out of place in the rendering of these austere products of the country of great organs and great organists.

The work under Mr. Barnby's direction is considerably curtailed. This is inevitable: as a whole, its performance—with all the "da capos"—would as certainly exhaust the patience of the most enthusiastic auditor as of the most untiring performer. Probably, however this curtailment may be made, somebody will miss something he would willingly have retained. Perhaps on another occasion Mr. Barnby will feel encouraged to restore a few of the excised numbers. Or how would it do to perform each part entire on two separate and not distant occasions? The *Weihnachts-Oratorium* is designed for performance on six different occasions. Anyhow, the occasional presentation of such a work is a thing to be grateful for, and a thing the possibility of which, a quarter of a century ago, would never have entered the mind of its great author's most enthusiastic worshipper.

JOHN HULLAH.

NOTES ON ART AND LITERATURE.

Professor Liebrecht writes to us to say that the opinion which he expressed in the *Academy*, vol. ii. p. 279, concerning Simrock's translation of *Midsummer Night's Dream* by *Walpurgisnachtstraum* was not intended to be final, and

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communicates the following summary of the objections which have been made to it :—

" In *Midsummer Night's Dream* mention is made of a May-day festival just over, which cannot be reconciled with the title or the remainder of the play. Kurz, the principal opponent of Simrock, attempted two years ago to explain the contradiction in the *Shakespeare-Jahrbuch*; but whatever view is taken of the question, the allusion to the 'observation' is only incidental, and cannot be relied upon as fixing the date positively and precisely, while in all the rest of the play a different time of year is certainly supposed. Thus Titania says to Oberon :—

" And never, since the middle summer's spring,
Met we
But with thy brawls thou hast disturbed our sport."

Midsummer nights therefore are the season for elfin revels, and the title is in complete correspondence with Titania's words.

" The objection that the title, *Midsummer Night's Dream*, may be spurious is met by Meres, who gives it, so to say, as the official designation in his catalogue of Shakespeare's works; and another suggestion, that Shakespeare may have written *Summer Night's Dream*, and included May in the summer, is equally untenable, for, like the Germans, Shakespeare and his contemporaries had long laid aside the old Teutonic division of the year into two seasons, and 'maying' and 'summerings' were kept even superfluously distinct. In short, there is but one single passage in the play where the season is May, everywhere else it is Midsummer; the one is a passing allusion, and the other is essential and lasts throughout the whole piece.

" But again, even supposing, what is not conceded, that May-night is the time of the play, it still should not be looked upon as *Walpurgisnacht*, for the English maying and the German witches' sabbath are two distinct and in their form diametrically opposite traditions, which must not be confounded. Shakespeare had no conception of a Walpurgis-night. It is only since Goethe that the idea has been common property in Germany: and to credit the great poet with a conception quite foreign to his mind is a serious falsification of literary truth. To the objection, ' We translate for Germans, not for Shakespeare,' it may be answered that Germans have a right to the genuine Shakespeare, who knew nothing about Walpurgis-night; otherwise we might have a translation of Homer in which Troy is bombarded with cannon."

Don Andrea Caravita recently completed his valuable book of reference on the codices and treasures of art in the abbey of Montecassino. With the publication of a third and final volume he carries the history of his monastery to the opening of the present century. An interesting MS. fragment describes the sack of Montecassino by the French, and the narrative, from the pen of an eye-witness, reads curiously enough at a time when the French are complaining of the plundering which the Germans are said to have carried on in France. The most valuable contributions which the book contains are, however, excerpts from accounts and papers illustrating the lives of Andrea da Salerno, Marco Pini of Sienna, Francesco and Leandro Bassano, Antonio and Francesco da San Gallo, Mariano da Nola, Solosmeo, and other artists of less note.

It has been hitherto believed that Andrea da Salerno, after studying under Raphael, retired to Naples, where he died in 1545. The Montecassino records give notices of the works which Andrea executed between 1518 and 1530 in the choir and two chapels of the monastery; they comprise a will drawn up at Gaeta a few days before the painter's death. Andrea resided habitually at Gaeta, where he produced several pictures. He was buried there in 1530 in the church of Sant' Angelo Palanzano.

Marco Pini is well known as a pupil of Beccafumi, who wandered from Sienna to Rome in 1549, and, passing south, founded a pseudo-Michaelangelesque school of art in Naples. The contract in which he agreed to paint the whole of the crypt-church of St. Benedict at Montecassino is dated 1557-8.

Travellers may still see in the refectory of the abbey a large picture, twenty-seven feet long by eighteen feet in height, representing the charity of St. Benedict. On a corner of the canvas are the words: "Leander Bassano fecit." This colossal piece was unknown to Ridolfi, and escaped the attention of Lanzi, though it was noticed in the chronicles of Gattola and Tosti. It was re-discovered, so to speak, in 1863, by M. de la Fage, who printed the records referring to it in his *Essais de Diphérographie musicale*. The curious fact which the documents republished by Caravita reveals is that the canvas was ordered in 1591 of Francesco Bassano, and left unfinished at his death in 1592. But a new agreement was made with Leandro, who

finished and delivered the work in 1593. But Leandro had no more right to sign his name where we find it than Giovanni Bellini would have had to sign Gentile Bellini's "Sermon of St. Mark" at the Brera.

For the first time we have a distinct account of the share which the San Galli and others had in the celebrated tomb of Piero de' Medici at Montecassino. It is well known that Piero had been appointed governor of the Cassinese estates by Louis XII., and that he successfully defended the abbey against the Spaniards. When the French star was on the wane, Piero tried to escape into the fortress of Gaeta, but he was lost in a storm at sea, and his remains after recovery were placed in a vault at Montecassino. It was not till Clement VII. received the tiara that any attempt was made to do honour to Piero's memory. Caravita's documents show that the mausoleum was planned by Antonio da San Gallo, executed by Solosmeo and other Florentines, and adorned with statues by Francesco da San Gallo. The first stone was laid in 1531, and the whole structure was finished, after many delays, in 1546, but the inscription was only carved in 1552, and the translation of Piero's remains only took place in 1559.

At no great distance from this mausoleum is the tomb of Guido Fieramosca, respecting which we ascertain that it was designed by Giovanni Mariano da Nola, who contracted for it in 1535, the carvers being Solosmeo, Giovanni Francesco di Chimento, and Lorenzo il Fancelo.

C.-C.

In the *Allgemeine Zeitung* for February 15, Julian Schmidt discusses, *d'après* of Hermann Grimm, the question whether contemporary artists ought to be criticized in their lifetime. He answers in the affirmative as regards all varieties of art and literature, and proceeds to characterize Grimm's *Essays on Modern Art* with a good deal of justice and discrimination, but the article is chiefly remarkable as an illustration of the endlessness of literary criticism when once criticism is recognised as a branch of literature. Hermann Grimm is an art-critic, and Schmidt's critique upon him would be fair matter for fresh criticism unless we decide that only original and independent contributions to art and literature should be criticized while their authors are alive, in which case only here and there an immortal critic like Lessing would live to be judged at all.

A. Gaedeke communicates to *Im Neuen Reich* (February 2) some unpublished letters from the Austrian minister in England at the time of Peter the Great's visit to this country in 1698. They confirm the report that the czar sat to Sir Godfrey Kneller for his portrait, and agree with other contemporary notices in failing to see in him much more than a barbarian with an extravagant taste for shipbuilding.

A curious discovery of buried treasures was made some days ago at Benevento by a mason who was removing the foundations of an old wall. His pickaxe struck upon a large pot, and on putting in his hand he found it full of freshly stamped gold coins. They proved to belong to the time of Manfred, and bear on one side his escutcheon, on the other the Suabian eagle.

The *Revue des Deux Mondes* (February 15) is enlivened by a *Proverbe* from George Sand; the dialogue has the lively dramatic neatness of which the French stage possesses and retains the secret, but it is a pity that the author, like most of her countrymen, seems unable to bring this remarkable and admirable technical dexterity to bear upon any other subject than the "to be or not to be" of a criminal intrigue; in this case the latter alternative is however preferred.

Towards the end of last year the *Anzeiger für Kunde der deutschen Vorzeit* published some extracts from a newly discovered Middle-Dutch poem on the Trojan War, which a writer in the *Allgemeine Zeitung* (February 13) proceeds to assign to Maerlant, the author of the *Spiegelhistoriael* and other works well known in the history of Dutch literature of the thirteenth century. The manuscript was found in the library of Graf v. Loë in Wissen-Weeze, and contains about 38,400 lines, though the end appears to be wanting. Its authorship is plain from a passage

which also establishes the identity of the "Jacob de Coster van Merlant," mentioned in the famous "boec van Merline," with the well-known poet Maerlant, who was therefore probably sexton of Maerlant, near Brielle. The romance of *Torec*, which has hitherto passed for an anonymous work, is, by a plausible emendation, restored to the same writer. Two other poems, one on dreams and the other on precious stones, are mentioned by name, and may perhaps be discovered hereafter, but the *History of Troy* is in any case an interesting and important work.

New Publications.

ANDREUCCI, O. Della Biblioteca e pinacoteca dell' Arcispedale di Santa Maria Novella, delle ricordanze dei suoi benefattori : considerazioni storico-critiche. Firenze : Campolmi.

ERZÄHLUNGEN u. SCHWÄNKE. (Deutsche Klassiker des Mittelalters mit Wort- u. Sacherklärungen beg. von F. Pfeiffer.) Leipzig : Brockhaus.

ESSAYS ON CATHEDRALS by various writers, edited by Rev. J. S. Howson. Murray.

HENKEL, H. Studien zur Geschichte der Griechischen Lehre vom Staat. Leipzig : Teubner.

KÖNIG RÖTHER. (Deutsche Dichtungen d. Mittelalters mit Wort- u. Sacherklärungen beg. von K. Bartsch. Bd. I.) Herausgeg. von H. Rückert. Leipzig : Brockhaus.

LAMARTINE, A. DE. Twenty-five Years of My Life. Transl. by Lady Herbert. Bentley.

MEISSNER, J. Untersuchungen üb. Shakespeare's "Sturm." Dessau : Reissner.

OBERMÜLLER, W. Die Abstammung der Magyaren, mit einer Einleitung üb. die kelt. Wanderungen u. die heut. europäischen Völker. Wien : Herzfeld u. Bauer.

PROVERBES et DICTONS agricoles de France. Strasbourg : Berger-Levrault et Cie.

SHAKESPEARE. Macbeth. Erkl. von W. Wagner. Leipzig : Teubner.

STRUVE, C. Supplement zu den Studien üb. den Bilderkreis von Eleusis. Hrsg. von H. Brunn.

WALCOTT, M. E. C. Traditions and Customs of Cathedrals. Murray.

Theology.

The Greek New Testament, edited from Ancient Authorities, with the Latin Version of Jerome from the Codex Amiatinus. By S. P. Tregelles, LL.D. Matthew to Philemon. Bagster and Sons, 1870.

Novum Testamentum Graece. Ad antiquissimos testes denuo recensuit, apparatus criticum omni studio perfectum apposuit, etc. C. Tischendorf. Ed. octava critica major. Vols. I. II. fasc. I. Lipsiae : Giesecke et Devrient, 1869, 1870.

A JOINT notice of these two editions of the New Testament is amply justified, as well by the similarity of their form and object, as by the common relation in which they stand to the labours of Lachmann. Assuming, as we may fairly do, that the careers of Tregelles and Tischendorf are well known to our readers, the first question which arises is obviously this, What are their respective principles of textual criticism? In the case of Tregelles, we are referred by himself to his *Account of the Printed Text of the Greek New Testament, &c.* (Bagster, 1859), and his *Introduction to the Textual Criticism of the New Testament* (Longmans, 1856). We regret that we have only had access to the latter of these works, but the remarks it contains on the character, &c. of manuscripts (pp. 24–389) are among the best which have been written, and confirm us in the earnest hope that the author may soon be well enough to bring out the prolegomena together with the small remaining portion of the text. A just admiration is expressed (p. 134, *sqq.*) for Lachmann, who is ably defended by Tregelles against many objections and misconceptions. At the same time the two notorious defects of Lachmann's edition are clearly brought out, viz. that the authorities cited are too few in number, and that the Greek MSS. were but imperfectly collated by Philip Buttman. Three (*i.e.* B, C, D) out of Lachmann's four primary documents (A, B, C, witnesses for the East;

D, for the West) were, as Tischendorf has shown (*Novum Testamentum Graece*, 7th edit. p. cix *sqq.*), not as yet properly edited. Both defects have been carefully avoided by Tregelles, whose authorities are at once more abundant than Lachmann's, and have been most scrupulously edited and collated by himself or by Tischendorf; in rare instances by others.

The object of Dr. Tregelles' edition is thus described by himself in the Introductory Notice :—

" To give the text of the New Testament on the authority of the ancient witnesses, MSS. and versions, with the aid of the earlier citations, so as to present as far as possible *the text best attested in the earlier centuries*; to follow *certain proofs*, when obtainable, which carry us as near as possible to *the apostolic age*."

This too was the aim of Lachmann, but is hardly in accordance with the words of Tregelles, which occur soon afterwards : " The object of textual criticism is the ascertainment, on grounds of evidence, of *what the sacred authors actually wrote*." For it is clear that the best attested is not necessarily the original reading, and Lachmann therefore drew a distinction between his diplomatic criticism, which is simply concerned with the best accredited text, and the function of exegesis, which has to restore the original text itself, and which he, as a mere philologist, modestly forbore to exercise. Tregelles, indeed, probably means chiefly that the actual words of the sacred authors are much more traceable in the earlier than in the later MSS., but his hesitation between the method customary among historians and practised even by Griesbach, of at once inferring the original reading, and the purely diplomatic method of Lachmann, cannot be mistaken. The difficulty of keeping criticism objective increases with the growth of the critical material, and the extension of the limits of textual evidence. Even Dr. Tregelles has not entirely succeeded in overcoming this. It is true that exegetical propriety finds no place among his criteria of a good reading, an omission doubtless dictated by the consideration that a reference to exegesis would interfere with a criticism which is essentially diplomatic. And yet his critical decisions are not always uninfluenced by internal evidences, of which no account is given in the notes below the text, and which we must therefore read "between the lines." This is clear from the examples given in the *Introduction* (p. 345 *sqq.*), where the critical evidence on the sections Matt. i. 18–25, xiv. 22–xv. 11, i John v. 7, is accompanied by a very explicit commentary. We are far from censuring severely this modification of theory by practice, and will only add that the critical rules stated in the preface to Part I., and at greater length in the *Introduction* (p. 343 *sqq.*), are well deserving of attention.

We now turn to the eighth edition of the *New Testament* by Tischendorf; the seventh has been already noticed elsewhere.* Very large additions have again been made to the critical apparatus, chief among which is the Cod. Sinaiticus. Without prejudice even to a Tregelles, we may venture to say that the material supplied by Tischendorf is marked by equal exactness, and is much more copious. Among other points of superiority is this, that Tischendorf has employed a greater number of cursives than Tregelles, who has contented himself with adducing a few important specimens, and that he has also mentioned how many of these support any particular reading. But, as we said before, this copiousness of material does but increase the difficulty of constituting the text, and this explains the charge, brought by

* See the present writer's review in *Studien u. Kritiken*, 1861, where Tischendorf's principles are compared with those of Lachmann, and his dissertation on "The Sinaitic MS. of the Bible with Reference to its Publication by Dr. Tischendorf" (*Stud. u. Krit.* 1864), where too an attempt is made to estimate the value of its text with especial reference to manuscripts A, B, C.

Tregelles (*Introduction*, p. 137 *sqq.*) against Tischendorf, of instability in his critical principles. Tregelles, too, has investigated the quality and value of his authorities more than Tischendorf has found opportunity to do, and on the basis of this investigation (*ibid.* p. 106) has undertaken, at any rate for the Gospels, to group the uncial MSS. according to their quality and affinity. The duty of also determining the quality of our critical authorities in the main from an exegetical point of view has been, to the best of his ability, fulfilled by the present writer, not only in the places referred to in the note, but in his *Commentary on the Epistle of Paul to the Galatians* (see the Excursus on Textual Criticism, p. 601 *sqq.*).

We may hope that Tischendorf may find space in his forthcoming *Prolegomena* for a more complete examination of the subject than he has yet published. Perhaps the result will be that the corruption of the text, supposed by this critic to have taken place before the middle of the second century, exists rather in the Gospels than in the Epistles, and that it has but seldom affected the meaning to any considerable extent.

The peculiarity of this eighth edition is that it professes to be based on the earliest authorities, purely internal evidence being thrown into the background.

"Quo in negotio, postquam Bentlejus, quem rursus Lachmannus sequutus est, ex ratione acquiescendum censuit, quæ tempore concilii Nicenæ per ecclesiam legi solebat, felicissime providente deo evenit, ut nobis ad Irenæi certe tempora redire liceat" (Preface, p. xiii.).

To this objective criticism, produced in the case of Tischendorf mainly by the discovery of the Cod. Sin. (see his *Synopsis evangelica*, 3rd edit. p. liii), we have already expressed our adhesion, though it still seems to us desirable to keep in view the other object as well, that, namely, of restoring the original text. But is the editor justified in his assertion that he can generally recover the readings which prevailed most widely in the second century? We think not. Supposing that we could argue from the Latin translation which arose in the second century to the Greek text employed, we should not therefore have arrived at the most prevalent form of the text, and still less so if, with Tischendorf, we regard the original text as having undergone no slight modification before the date of this Latin translation. And it has scarcely been made out by the editor that the Cod. Sin., on account of its agreement with Origen or the *Itala* in isolated passages, deserves to be treated, even in a partial degree, as a witness of the second century. As the case stands at present, it will often be easier to restore the original text than that of the second century. Besides, the Cod. Sin. seems to be over-estimated in various places, even according to the editor's own principles, e.g. when John xxi. 25 is excised contrary to the express testimony of Origen.

In conclusion we will mention a few passages in which the sense is affected by the variety of readings, and from which it will appear how much depends on the correct application of a critical method, and that even such eminent critics as those before us, starting from essentially similar principles, not unfrequently arrive at a different result. For instance, Matt. vii. 13, Treg. reads ἡ πύλη, Tisch. brackets it; vii. 14, Treg. reads τί στενή ἡ πύλη, Tisch. στι στενή [ἡ πύλη]. The former seems to me to be right in both cases: τί is more probable than στι, as less common in this sense, and therefore liable to be replaced by the στι of the preceding verse. Matt. xxvi. 28, Treg. has τῆς καυῆς διαθήκης, Tisch. τῆς διαθήκης. We prefer the former reading in this passage, the latter in Mark xiv. 24, and explain the omission of καυῆς in A from a harmonizing tendency, while A, for the same reason, has καυῆς in Mark xiv. 24. From the point of view of objective criti-

cism, Tischendorf might have omitted καυῆς with the two earliest MSS. Luke vi. 1, Tisch. has ἐν σαββάτῳ δευτερόπρωτῳ, Treg. omits it. No doubt it is wanting in A, B, but this is because the difficult chronological datum was not understood. John i. 18, Treg. μονογενὴς θεός, Tisch. ὁ μονογενὴς νιός. The former reading is a dogmatic correction, as is shown by the patristic quotations. Explanations and alterations of the text by eminent Fathers have occasioned corrupt readings, more than many critics are inclined to allow. The works of the Fathers should therefore be examined in this as well as other aspects. Both our critics omit the addition to Matt. xxvii. 49, ἀλλος δὲ λαβὼν . . . αἷμα (comp. John xix. 35), in spite of a remarkable weight of testimony, and this with reason, at least if we aim at the original reading. Luke xxiii. 45, Treg. καὶ ἐκοινώθη ὁ ἥλιος, Tisch. ἐκλιπόντος τοῦ ἥλιου. The former is certainly correct, for a true solar eclipse does not take place at the time of the full moon (see the writer's *Chronologische Synopse*, &c. p. 387), but earthquakes are accompanied by obscurations of the sun. The Fathers, particularly Eusebius in his *Chronicon*, were accustomed to connect the year of the Crucifixion with a real solar eclipse reported by Phlegon (his words are ὁ ἥλιος ἔξελυπτε), and this was the origin of the reading. Luke xxii. 43, 44, and xxiii. 34, are rightly retained by both critics, in spite of several old MSS., especially B (and we may now add A), which omit them with an evident eye to Christology. Luke ii. 1, both critics omit the article before ἀπογραφή; they have the historical fact, too, on their side. John v. 1, Treg. rightly omits the article before ἑορτή; Tisch., who omitted it in the seventh edition, now inserts it, apparently induced by A. Of course "a festival" is intended, namely Purim; comp. John iv. 35, vi. 4. So, too, he now reads, John v. 2, βηθέσδα, while Treg., with whom we rather agree, has βηθέσδα. These examples may suffice to show that the purely diplomatic method of criticism does not always lead (though it does often lead) to the discovery of the true reading, even in the hands of the most skilful and learned critics.

K. WIESELER.

Christian Ethios. [Die christliche Ethik, dargestellt von Dr. H. Martensen, Bischof von Seeland. Allgemeiner Theil.] Gotha : Besser.

IT has been justly observed that ethics will continue to be the most interesting of the sciences, as long as it deals with general principles, and theories of the world and of life, but must at once become as tedious and trivial if we pass to disputed points of detail, such as are supplied by the doctrine of duties, casuistry, &c. Even Rothe gives an indication of sharing this view, when he declares (*Theolog. Ethik*, vol. iv. p. xlvi) that the pleasure with which he has worked at the doctrine of good and of virtue is equalled by the struggle it cost him to elaborate that of the duties. Our author, on the contrary, believes that the side on which ethics is related to the concrete forms of morality is equally important with the doctrine of principles (p. 82). How far he will succeed in avoiding the rocks of obviousness and redundancy, on which so many attempts to draw out a system of rules for life's shifting relations and demands have split, will be seen from the second part of this work. The volume before us is confined to the theoretic half of the subject. The introduction consists of an enquiry into the postulates of Christian ethics, i.e. the ethical conception of God as the only God, and of man as the creature made in the image of God. It is on the whole a summary of the contents of the well-known *Christliche Dogmatik*, to which this system of "Christian Ethics" forms the counterpart. As for the fundamental ethical conceptions themselves, our author treats of them under the points of view developed

and definitively constituted by Schleiermacher and Rothe, those, namely, of the highest good, virtue, and law. His manner, however, is nothing less than scholastically abstruse or pedantic. The vivid form which he employs in order to unfold the primary moral ideas, standards, and ideals, comes very near that of the English "essay." In tone he preserves a happy mean between the purely scientific and the religious or devotional, and we think his book will supply a valuable mental stimulus to those who combine a habit of reflection on the riddles of life with the traditional supernaturalism of which the author is a representative. H. HOLTZMANN.

Intelligence.

Mr. S. R. Driver, Fellow of New College, Oxford, has edited, with a translation and notes, a commentary on Jeremiah and Ezekiel by R. Mosheh ben Shesheth. The author was a learned Spanish Jew, who emigrated to Babylonia towards 1200. He wrote *scholia* on several Biblical books, of which only the present is known to exist in a MS. of the Bodleian Library. His system is rational, not Agadic, and he is now and then really felicitous in his explanations. It was not an easy task to edit a unique MS., which is besides somewhat defective, and not very distinctly written. As far as we have seen, both text and translation are fairly correct; and the numerous notes of the editor testify to his knowledge of Rabbinic literature, as well as of modern grammarians. But why does he try the patience of his English readers by writing Raschi instead of Rashi, Chajjug instead of Hayyug? On the title-page we even find Ezeqiel; why not be consistent, and write either Y'hezqel or the naturalised Ezekiel?

Students of the text of the Old Testament will welcome the belated appearance of the nominally first fasciculus of Mr. Field's *Hexapla* (Clarendon Press, Oxford), containing fragments of the versions of the Pentateuch. The execution of the work shows no signs of falling off. Professor Dillmann has brought out the second part of the second volume of the *Aethiopic Old Testament*, containing the third and fourth books of Kings. It is based on a collation of three families of MSS.: 1. That representing the earliest form of the text; 2. That revised in accordance with another recension of the LXX. text; and 3. That corrected by the light of the Hebrew. The text is printed from the first of these three, but the variants, often considerable, of the other two are given in the notes.

Prof. Riehm has an important article in the *Studien u. Kritiken*, No. 2, on the so-called primary record in the Pentateuch, with reference to Graf's remarkable work on the historical books of the Old Testament.

Two popular essays on the narratives of the Deluge deserve attention from the reputation of their authors, one by Dr. Nöldeke in *Im Neuen Reich* (the new German *Macmillan*), the other by Dr. Diestel, in a series of lectures published by Holtzendorff and Virchow. A brilliant paper on the Bible and archaeology, by M. Jules Soury, in the *Revue des deux Mondes*, Feb. 1, seeks to co-ordinate the Assyrian discoveries (?) of M. Lenormant, who "glories in the name of Catholic," with the most advanced theories of Biblical criticism.

Dr. Davis' new *Student's Hebrew Lexicon* (Asher and Co.) aims at supplying a want that has long been felt by beginners. It is at least portable and cheap, but the attempt at comparative philology is of very questionable value. We decidedly prefer Bagster's *Gesenius*.

Dr. Hase, of Jena, most amiable and cultivated of "Rationalists," has published his recollections of his youth, chiefly from old diaries. *Ideale und Irrthümer* appeals not only, nor indeed chiefly, to theologians, but throws a flood of light on the political and intellectual currents among German students from 1818 to 1830.

Dr. Grätz, of Breslau, has gone to Jerusalem to collect further materials for vols. i. and ii. of his *History of the Jews*.

Prof. Oehler, of Tübingen, a moderate theologian of the semi-orthodox school, died on Feb. 18.

Contents of the Journals and Notes.

Jahrbücher für deutsche Theologie, vol. xvii. No. 1.—Huther on the signification of *סָרֵךְ* and *מִרְאֵךְ* in the Johannine writings.—Schirm on hints for pastoral theology in the pastoral epistles.—Stern on John Milton and Calvinism. [Milton's theological liberality.]—Zwingli, a lecture by A. Ritschl.—Reviews of books: Ewald's *Biblical Theology*, by Dillmann. [Eulogistic.]—Kleinert's *Deuteronomy*, by Stähelin. [Approximates to the very singular position of the author.]—Merk's *Job*, by H. Schütz. [Very thorough review.]—Laurent's *Clemens Romanus*, by Jahn. [Unfavourable.]—Lipsius' recent works, by Weizsäcker; &c.

Monatschrift für Gesch. u. Wiss. des Judenthums, Jan.—On the syllable *hal* in Deut. xxxii. 6, by Dr. Grätz. [Two motives for its

separation: 1. To emphasize the sentence; 2. To avoid the danger of cancelling a whole column, in case a syllable prefixed to the second name were miswritten.]—Feb.—The sons of Tobias, the Hellenists, and the Proverb-writer Sirach; and the prophet Jeremiah in Ramah, by the same. [1. To account for the apostatizing tendency among the Jews of that period; 2. To show that Jer. xxx. xxxi. xv. 10-19, were written after the fall of Jerusalem among the captives at Ramah.]

New Publications.

KALISCH, M. M. *Leviticus*. Part II. (completion), with historical and critical commentaries, a new translation, and five treatises. Longmans.

KEIM, Th. *Geschichte Jesu von Nazara*. III. Band (Schluss). 2. Der jerusalem. Messiasstad. Zürich: Orell, Füssli und Co.

LUYNES, Duc DE. *Voyage d'Exploration à la Mer morte, à Pétra et sur la rive gauche du Jourdain*. (En livraisons.) Paris: Bossange.

Philosophy and Physical Science.

A NEW SYSTEM OF PHILOSOPHY.

Philosophy of the Unconscious. [*Philosophie des Unbewussten*. Von Eduard v. Hartmann. Dritte beträchtlich vermehrte Auflage.] Berlin: Carl Duncker, 1871.

THE rise of a new philosophical system, which its adherents hail as embodying the most important metaphysical discovery since Hegel and Schopenhauer, cannot be viewed with indifference, and curiosity changes into interest when we find on what principles it claims to rest. Dr. Hartmann modestly confesses that the mysteries of the Dialectic Philosophy are as inaccessible to him as to the ordinary world, and he declares in favour of a simple inductive method, by which he hopes to reconcile or at least to lay the foundations of a system which shall reconcile and embrace the last conclusions of physical science and speculative philosophy. He does not disguise from himself the difficulty of the task, and it would certainly be impossible to exaggerate its importance. In examining the value of his present contribution towards its accomplishment, we must remember that something is gained if only the conditions of the problem have been clearly stated, and the best means for its solution correctly pointed out. For this reason we are anxious to do full justice to the "Philosophy of the Unconscious," and though the author is somewhat unmethodical in the exposition of his views, this can perhaps be better done by following his own arrangement than by recasting his arguments in a logical order which he might repudiate.

The nature and existence of "the Unconscious" have to be explained and demonstrated in the course of the work, but the meaning of the name can be described at once; it does not stand for *unconsciousness*, but for "the unknown positive subject of whom unconsciousness can be predicated," for the *unconscious Will and unconscious Idea of the Unknown*. The name is new, but the thing, as the author explains, is only his equivalent for the common first principle of every considerable philosophy (Spinoza's Substance, Schelling's Subject-Object, Fichte's Ich, Plato's and Hegel's Idea, Schopenhauer's Will, &c.), now for the first time approached by the light of scientific experience instead of *a priori* reasoning. To relieve philosophy from the reproach of remoteness and unpracticality would be much, and considering how slowly metaphysical science advances, it would perhaps be more to have suggested a name which designates the sum of our actual ignorance rather than a climax of fancied knowledge. There are some scientific discoveries which are a mere question of time and patience, there are others which may reasonably be expected to follow from the first, and there are also questions which we are at present quite unable to conceive as soluble by the methods of

mathematical or physical science. If these questions have anything more than their inscrutability in common, *x* might be a better name than the Unconscious for the unknown quantity; but it is certainly well that there should be some general name under which we can conceive all that we do not know in contradistinction to all that we do or easily might know. Unfortunately, Dr. Hartmann aims at more than this simple clearance of the intellectual ground, and the whole superstructure of his argument rests on no more solid basis than the evidences of design in nature! It is the old story of the watch and the watchmaker with fresh illustrations taken from the more curious facts of natural history, and we might think we were reading Paley but that the name of the artificer is changed, for the Unconscious is endowed with all the old theological properties, Eternity, Omniscience, Omnipotence, and especially Incomprehensibility, which serves here as elsewhere to explain why the others are not of more use to their possessor.

The author confesses that he does not hope to convince any one who is not already persuaded that nature works with a purpose (*Endsweek*), and he is perhaps right not to think highly of the efficiency of reasoning if he himself, after studying Spinoza, Hume, and physical science, still finds it possible to ascribe anthropomorphic motives to nature and to consider cause as a metaphysical idea. However, in support or confirmation of the opinion where it exists, he has one curious argument. Assuming that everything must have an efficient cause, that cause must lie either in the material circumstances attendant on the production of the effect, or in other material circumstances, or it must be of a spiritual nature. The second alternative is inadmissible because all the material circumstances which can in any way influence the result are supposed to be reckoned in the first, so that it may be said that there is an equal antecedent probability in favour of the material or the spiritual character of the desired cause. Thus far there is nothing amiss, except the application of the law of chances to ascertained physical facts; but the author proceeds to argue as if no physical facts were ascertained, that the probability of the cause being spiritual increases with every material circumstance that is set aside as not cause. In illustration he enquires why hens sit, and children see with their eyes, and enumerates the conditions required for both phenomena, with the omission of the one thing needful in the eyes of a naturalist—their descent from animals with eyes and a habit of hatching eggs. Of course the laws of inheritance can only give the reason, not the cause, of the occurrence, and science does not trouble itself to provide the hen with an adequate motive for her sudden adoption of a sedentary life, such as Dr. Hartmann finds in the intention of the Unconscious that the species shall be preserved. But in the second case there is not even the appearance of voluntary action, and all the mathematical formulæ brought together to determine the degree of improbability (0·99994) that the fourteen physical conditions of sight which he enumerates should come together fortuitously, are little short of absurd in face of the simple fact that parents with two eyes and the necessary optical apparatus do, under normal conditions, invariably give birth to children similarly endowed.

The body of the work—for thus far we have not got beyond the introduction—is divided into three sections:—A. The corporeal manifestations of the Unconscious; B. The Unconscious in the mind; C. The metaphysics of the Unconscious. In these, two points have to be established: first, that the words unconscious thought and unconscious will do not involve a contradiction in terms; and, secondly, that we see traces in nature of thought and will which we cannot refer to any known conscious subject. It is one of

the difficulties of the attempt to reconcile science and speculation that we are obliged to use abstract terms before the nature of the things they denote has been ascertained. In the present case we are called upon to recognise the assumed effects of Will and Idea in the first book, while the possibility of their existence is considered in the second, and their reality not till the third book. A better arrangement might have been possible, though, we admit, not easy. Following the author, we begin with "the unconscious will in the independent spinal and nervous systems," and the "unconscious idea which presides at the execution of involuntary (*i.e.* reflex or mechanical) movements." Apart from the teleological tendencies already noticed, it is a matter of indifference (or terminology) whether conscious human will is explained away into the action of physical laws, or whether the action of physical laws is uniformly described as voluntary, but less than nothing is gained if we are simply invited to credit nature with will in its popular acceptation of free preference and choice. In some passages the author seems almost guilty of this inconsistency, but it is not a necessary part of his system. Will in the abstract does not exist, and any particular act of Will can only will the transition from one state or condition to another. The tenour or content (*Inhalt*) of the Will is formed by the Idea of two states, one of which is viewed as actual and the other as desirable, and the will itself is the longing or striving after the realisation of the second idea, or, to speak more precisely, Will is defined as the immediate cause of whatever change takes place.

Before tracing the distinction between conscious will and idea and the same faculties as ascribed to the Unconscious, we have to ascertain what the author understands by consciousness. In the first part the answer is that of simple materialism: the threshold of consciousness is passed whenever the clearness and strength of the brain-vibrations reaches a certain point. It is in the account of what takes place short of that point, and in the metaphysical explanation of the dawn of consciousness, that, for better or worse, we come to something original. Consciousness (Bk. C. 3) is also "the stupefaction of the will at the sensible existence of an idea not willed by itself." How the will, which, according to a very able argument, is shown a few pages farther on to be naturally and necessarily unconscious, can be supposed capable of feeling (*i.e.* being conscious of) astonishment, is not explained. And the companion demonstration that consciousness cannot be an inherent element of the idea, but must be something accidental to it produced from without, has the effect, whether intentionally or not, of neutralising all the preceding materialist admissions. In effect Dr. Hartmann makes conscious thought material, and unconscious thought the reverse, a proceeding plainly at variance with his own principles of the economy to be observed in explaining natural phenomena. The passages which he quotes from idealist philosophers, who knew even less than we do of the physiology of the brain, to show that they recognised the existence of thought which had not quite passed the threshold of consciousness, refer in their original contexts rather to thought which as thought is not yet quite perfect and complete. Spinoza's "confused ideas" should have been coupled with Kant's "dunkle Vorstellungen." We should have expected to find a writer, who goes so far in his devotion to positive science, prepared either to deny the existence of unconscious ideas or to explain it as a state of the brain to which the finishing touch, which brings consciousness, was still accidentally wanting. Materialism offers the simplest solution of such problems as memory, association, &c., for material modifications of the brain may be of many kinds or degrees without quite reaching that kind or degree which corresponds to completely developed

thought or consciousness. And it is not easy to see why, after braving the dangers and difficulties of an unpopular system, he rejects its help when most readily available. If consciousness presupposes thought, and thought presupposes certain physical conditions, the cross requisition of a contradiction to will is superfluous, though its presence may be recorded as a fact in psychology. But psychology is not the author's strongest point, at least there is much that might be objected in detail to his account of the next phase of the unconscious idea, in which it seems simply to be a name for as much of our ordinary mental processes as has become mechanical and involuntary from habit, or is too swift and simple for analysis.

After the proof that unconscious thought is possible follows the enquiry into the thought of the Unconscious, and all Dr. Hartmann's learning and ingenuity are called upon to bridge the yawning gulf between the two. He explains by the influence of the Unconscious in language the strangely perfect grammatical arrangements of barbarous languages, which have before now been claimed by Christian apologists as evidences of the miraculous origin of speech, and are scarcely more strange than the way in which figures lead of themselves from one combination to another, or the way (only proving that human thought obeys its laws) in which men of genius divine remote discoveries, and one intelligent system of philosophy is always on the point of blending with another, and that of leading to a third. But his chief reliance is of course upon the argument from design, in support of which he multiplies stories of instinct and instances of adaptation, from all of which he draws the same inference which their number does not strengthen; namely, that the course of the material universe is governed and actuated by mind, to wit, the mind of the Unconscious, an entity of a somewhat theological character, indefinitely more so at least than Spinoza's God, as the author in his third edition expressly admits. Here it is that Dr. Hartmann disappoints expectation: the Unconscious, or, as we should prefer to say, the Unknown, must be looked upon provisionally as the agent in innumerable natural processes; but it is impossible that a general name, improbable that a supernatural being, should be actuated by human feelings such as want and wish. The actual tendencies of nature can and must be recorded and summed up, but we can account for very few, and the attempt to explain and motive all has never yet led to anything but Fetishes. But even supposing, as in the absence of proof to the contrary is allowable, that the Unconscious is the one and indivisible mind of the universe, it does not, on the whole, will the preservation of every species, but (since it is omnipotent) what takes place, i.e. the struggle for existence, and the alternating inferiority of its own most ingenious contrivances for offensive and defensive warfare.

The distinction between the will of the brain and that of the nervous or muscular system is no doubt valid. The brain possesses very little indirect and no direct power of influencing the course of such vital functions as the circulation, respiration, digestion, &c., which are fairly paralleled to the instinctive life of less developed animals, and like that might perhaps be ascribed to the unconscious will of the organism, but have nothing to connect them with the intelligent will of the Unconscious. The author supposes "intelligence in the central organs," but the intelligence is probably of the same transcendental character as the will and the ideas: for, whatever else is doubtful, science certainly tends to establish an indissoluble actual connection between rational and conscious mind and brain-fibre of a particular kind. It is for physiologists to decide whether the spinal marrow and ganglia do what they do in so far as they approximate in

composition to the organ of thought, but the intelligence of which Dr. Hartmann speaks is independent of these conditions. Instead of resolving the dualism of mind and matter into a higher or simpler unity, the third hypothetical element which he introduces merely parodies the known forms of the other two, and while its very existence does not admit of scientific proof, the imaginary fertility of the principle discourages really hopeful trains of thought. Thus, in the third Book the author appears for a moment on the point of arguing to the real existence of the world from the independent material existence of the human body as evidenced by the material conditions of thought, some of which fall within and others without the direct sphere of consciousness. The hint is not followed up, though we can scarcely imagine a discovery more likely to lead to the reconciliation of science and philosophy than a rational inference from physical facts in favour of a doctrine which no deductions *a priori* have yet succeeded in securing against the attacks of scepticism.

It would take too long to examine the "Metaphysics of the Unconscious" as carefully and minutely as they deserve, for even when we decline to follow, or perhaps fail to trace, the thread of the main argument, the incidental matter is always interesting and suggestive, and the more abundant that the author's method is not severely consequent. Chap. V., "Matter as Will and Idea," is perhaps the most important, though the physical theories it contains are rather in advance of our present knowledge, and, a still more serious objection, they do little to support the metaphysical assumptions previously made. In a perfectly consequent scheme unconscious mind would correspond to rudimentary atomic matter; the Unconscious would begin where the conscious ends, and the continuity of nature, already defended in a chapter on Consciousness in the Vegetable Kingdom, might have been firmly established. The existence and nature of the Unconscious, however, having been already taken for granted, it only remains to reduce the elements of consciousness to their simplest form. Matter is, on the one hand, "a system of atomic forces in a state of equilibrium," on the other, "a combination of acts of will emanating from the Unconscious." Of course, the idea of force ends by swallowing up that of the material upon which it acts; but we must ask what is a *Kraftpunkt* without the idea of extension, and therefore of body; and in this atmosphere of rarefied speculation the paradoxical redundancy of the Unconscious to cause what is already accounted for, or to account for what does not take place, is more apparent than ever. The conception of individual existences is also rendered unnecessarily difficult by the attempt to deduce their singularity from the Unity and Totality of the Unconscious. Individuality of character is surely either a series of facts or a generalisation based on them, and in real existence it is similarly either physical or rational; the germ-cell and the conscious mind are one and many, according to the definition preferred.

We have not as yet noticed the extent of Hartmann's obligations to Schopenhauer, which are about equivalent to those of Schopenhauer to Kant, but rather less freely and gratefully acknowledged. In the chapter on "The Unreason of Willing and the Misery of Being," Schopenhauer's influence is supreme, for pessimism is not the conclusion to which a systematic admiration of the works of nature would seem to point. Optimism of an unusually sweeping character would have been more natural, and indeed the supposition of unconscious happiness seems almost necessary to stimulate the unconscious will to give effect to the unconscious idea. Instead of this we find one more paradox. The Unconscious is All-wise and All-powerful, and the world is

the best possible world; but that does not interfere with its being heartily bad, and in fact a great deal worse than nothing. *Why* it could not have been better is not exactly explained, though the author is no doubt right in supposing that it would if it could. His remedy for its evil estate only differs from that of Schopenhauer in being more radical. Annihilation is the goal, but the annihilation of the individual is not enough.

"Du kannst im Grossen nichts vernichten
Und fängst es nun im Kleinen an."

is the reproach he addresses to his master. The release of one man is followed (such is the imbecility of will) by the birth of another, and even if the whole human race were to die out by common consent, nothing would be gained, for "the poor world would still continue and the Unconscious would have to take the first opportunity of creating a new man or other similar type." "The whole creation groaneth and travaileth with us," and the problem is to enable the rational will for self-destruction to outweigh the blind, *alogical*, absolutely stupid creative will. Consciousness is the first step towards the attainment of the desired result, but the later ones are involved in mystical obscurity, only for our encouragement it is pointed out that the world will probably have an end, because it has an *Endzweck* (aim) which would be absurd on its part if the aim were not attainable, while its attainment of course marks the conclusion of the world-process thereto directed. Here however an awful prospect opens before us. Even when the universe has committed suicide by the exercise of moral forces as yet undreamt of, "the possibility still remains that the potentiality of the will may once again decide itself in favour of willing," and a new universe and after that another and an endless series beyond may come in the future to know "the misery of being." It is true that the author calculates the probabilities after his favourite fashion, and settles that the chances are against existence, but the apprehensions he excites are too lively to be allayed by a sum. Schopenhauer's Nirvana is surely better than this still more Indian vision of infinite worlds. The blind will which has once produced the calamitous phenomena of existence may do so again, for it is as incapable of experience or memory as of reflection, while no being capable of reflection could have voluntarily created the mass of evil actually extant.

This last rather circular argument has not prevented the obvious enquiry as to the difference between Dr. Hartmann's "Unconscious" and the God of the vulgar. In the rapidly succeeding second and third editions of his work he has attempted to answer the question in a manner which seems, upon the whole, intended to qualify the uncompromising irreligion of his central standpoint. He treats Pantheism as the inevitable outcome of philosophical theism, and admits that the Unconscious is simply the Pantheist's God without the attribute of consciousness, which he thinks ought not to be ascribed to nature on the mere ground of analogy, though he was content to attribute intelligence for no better reason. He concludes that there is no valid distinction between philosophical theism rightly understood and the philosophy of the Unconscious, but the motto on his title-page, "Speculative Resultate nach inductiv-naturwissenschaftlicher Methode," should warn him not to carry his concessions too far. Philosophical theism, however "rightly understood," is not a doctrine that can easily be proved by the inductive methods of natural science. The other additions, amounting in all to something like a seventh part of the original work, serve rather to complete and amplify the superstructure than to strengthen the foundations of the system, or to modify its general character.

To sum up the results of this new philosophy in a few words: The Unconscious is a metaphysical divinity who reigns but does not govern; Will is an irrational fate whose decisions are not final, and Consciousness is the creature of one and pupil of the other of these two inaccessible forces which it is to reconcile in the common destruction of itself and them. Untenable as a system, the "Philosophy of the Unconscious" is certainly the work of an able man, but the author is heedless as well as daring, and he follows the uncertain course of his ideas without pausing often enough to compare the whence and the whither.

H. LAWRENNY.

Intelligence.

An attempt is being made to raise a testimonial—"Ehrendank"—to Ludwig Feuerbach. The committee who have recently published an appeal on his behalf include (among other well-known German residents in England) Professor Goldstucker, Dr. Max Schlesinger, and Feuerbach's former fellow-worker in the famous *Hallese Fahrbücher*, Arnold Ruge. The intrinsic value and historical importance of Feuerbach's work none can doubt who has even a superficial acquaintance with the troubled period of German thought from Hegel's death to the revolution of 1848: a period dominated by the effort to unriddle the ambiguous utterances which—in all departments of thought, but especially in theology—the oracle of Berlin had left as the final outcome of philosophical method. Among the knot of younger thinkers who first developed in a negative direction and finally broke loose from the master's system, Feuerbach is the most impressive, with the doubtful exception of Strauss. His work has not the weight derived from concentration and coherence, nor his mind the clear grasp and steely acumen that belong to Strauss, but in impetuous comprehensiveness of speculation, the passionate earnestness of utterance, even the very incoherency and inconsistency with which he pursues truth in leaps and springs down the bewildering precipice of negation, he seems the more representative man. As such work as his inevitably excludes the worker from the ordinary material rewards of intellectual toil, such a recognition of its value as the committee propose seems very appropriate, especially when, as the appeal informs us, the philosopher, at the age of 68, is bearing the double burden of disease and severe pecuniary losses. The treasurer's address is, Herrn Gustav Sachs, 39, Mincing Lane, E.C.

Scientific Notes.

Anthropology.

Primitive Urn.—Dr. Marschall, of Marienburg, describes (*Zeitschrift für Ethnologie*, Berlin, 1871, part vi. 120) an urn found in an ancient tomb at Liebenthal near Elbing, on one of the mouths of the Vistula. The remarkable feature of it is that, while the other clay urns found in the district are invariably plain, this one has a cover rudely modelled in the form of a human head, resembling the Canopic urns of the Egyptians, and, still more, certain very early examples of Etruscan pottery. Dr. Marschall points out that the place where this urn was found is not more than six German miles distant from the ancient Truso (on Lake Drusis), the centre of the amber trade in early times, and imagines Etruscan traders to have conveyed or sent thither, among other wares to be exchanged for amber, urns of this description. But the Liebenthal specimen is more rude than the rudest Etruscan ware: whence it is conjectured to be the work of a native potter copying perhaps a pretty rude Etruscan model, a conjecture which seems to be well founded considering the amount of Etruscan work in metal and other materials already found, not only in the district in question and along the shores of the Baltic, but also in most other parts of Europe. The dates he assigns as the limits within which it must have been made are B.C. 1000 and B.C. 300, corresponding to the duration of the Etruscan nationality. The word Trusi may or may not be related directly to Trusci and Etrusci.

Stone Implements found in Greece.—Mr. George Finlay's collection of implements of the stone age found in Greece consists now of about 300 pieces, considerable additions, both in numbers and importance, having been made during the last year. Dr. Hirschfeld (*Zeitschrift für Ethnologie*, Berlin, 1871, part v. 106) describes them as mostly axes, chisels, and hammers, but all excepting two without any trace of handles. Two are of precious stone and small, one being cornelian, the other amethyst, but the material generally is serpentine, diorite, nephrite, granite, porphyry, or haematite. It is strange that of all places in ancient Hellas the first where implements of the stone age were found should be the neighbourhood of Orchomenos, the seat of the

Minyæ, whom the Greeks used to look back to as the prehistoric founders of their civilisation. As yet these implements have mostly been found in Eubœa, Boeotia, Attica; in the Peloponnesus at Gythium, Sikyon, Corinth, and Epidauros; in Macedonia, at Athos, and in Thessaly. Mr. Finlay is an English resident at Athens, and well known as the author of the *History of the Byzantine Empire*.

In the *Journal of the Anthropological Institute of New York*, vol. i. No. 1, 56, J. W. Ward describes some remarkable sculptured rocks near the town of Barnesville, Belmont County, State of Ohio. They are the outcrop of the coarse carboniferous grit of the Muskingum coal-beds, and lie, slightly tilted, a foot or two above the soil. They bear, as the drawings accompanying the paper show, chiselled intaglios of the footprints of the buffalo, deer, wolf, or possibly the dog, the bear, land-birds, one of which is undoubtedly the turkey, water birds, and prominently man, both juvenile and adult; presenting in each case the exact appearance of the natural tread in plastic clay of the several animals represented. In the case of the representations of the birds' feet, the details of the general plant of the foot, the spread of the toes, the joints, the phalangial cushions, and the whole impressions are so perfect that the author almost accepted the suggestion that they are real bird-tracks. Engraved figures of the foot-tracks of animals are frequently met with throughout the States, rarely, however, in association with those of man, and they are generally mere scratches in outline. On each of the Belmont slabs is a well-drawn figure of a serpent in motion.

Geology.

The Nullipores in Limestone.—Limestones of many formations, but especially of the triassic and tertiary, are composed of small organic bodies, which have hitherto generally gone by the collective name of "Nullipores." C. W. Gümbel has collected Nullipores of every variety, from all formations, and subjected them to the most critical examination. In a lengthy paper on the subject (*Abh. der bairischen Akademie, II. Classe, Bd. xi. Abhandlung 1*) he divides the so-called Nullipores into two great groups, the one belonging to the Dactylopores and the other to Lithothamnum; the former occur principally in triassic rocks, the latter in tertiary limestones. There are likewise a number of subordinate forms, as Ceriopora, Pustulopora, &c. As yet Gümbel has only described the second group, the Lithothamniae. It is remarkable that the recent representatives of this group contain only two per cent. of organic matter, the remainder being inorganic, and consisting chiefly of carbonates which were most probably produced in the organism of the plant from the sulphates of lime and magnesia of the sea-water. This powerful collector and consumer of carbonates of lime caused during the tertiary epoch the enormous deposits of "Nullipora" limestones of the Vienna basin, of Northern Italy, and the pisolithic limestone of Paris. A point of great interest is the enormous percentage of magnesia in certain recent Lithothamniae, reaching in some cases 17 per cent. And it is a question whether the agent of the direct formation of dolomite and dolomitic limestone may not perhaps be traced to this vast collector of mineral matter.

Infra-Lias in Yorkshire.—The Infra-Lias, i.e. the zone of *Ammonites planorbis* and *A. angulatus*, has hitherto been only found at Redcar. In a paper read at the meeting of the Geological Society of London, January 24, the Rev. J. F. Blake described its occurrence in section at Cliff, near Market Weighton, where it and lower beds are well exposed, and yield an abundant suite of fossils. He considers, however, that these beds do not belong to the typical Yorkshire area, but are the thin end of the series which stretches across England. He supposes there was a barrier in Carboniferous times, separating the coalfields of Yorkshire and Durham, breaking the continuity of the Permian beds, and curving round the secondary rocks to the north of it, formed the real Yorkshire basin, while the beds at Cliff were immediately to the south of it.

The Upper Greensand of the Neighbourhood of Cambridge.—At a meeting of the Geologists' Association, held on February 2, the Rev. J. G. Bonney, of Cambridge, read a paper on the geology of the Cam valley, and described the position of this seam, which is barely a foot in thickness, and rests on the eroded surface of the Gault. It is full of green grains and dark nodules, rich in phosphate of lime, the matrix being a fine chalky marl, full of Foraminifera and minute fragments of organisms, with a considerable mixture of mud, insoluble in hydrochloric acid. The composition of the green grains, commonly called glauconite, was shown to differ considerably from that of the typical mineral bearing the name. He failed to convince himself that any of the granules are casts of Foraminifera. The fossil remains of the deposit are remarkable, more especially for the number and size of the Pterodactyles and Turtles. Mr. Bonney believes this deposit to have been formed during the Upper Greensand epoch, but to contain many fossils that have been derived from the Upper Gault by slow denudation.

The Occurrence of Brackish Forms in Marine Deposits.—Dr. Lorenz was the first to notice that in places where organic masses

are in process of decomposition a true brackish fauna springs up. Th. Fuchs (*Verhandl. geol. Reichsanst. 1872, No. 2, 1*) has had an opportunity of observing the same phenomenon in the Bay of Messina, where large quantities of refuse are thrown into the sea at a point where a brackish fauna has arisen, strangely contrasting with the neighbouring marine forms. He found amongst them large numbers of *Cerithium mediterraneum* (Deh.), with *Buccinum nigratum*, *B. corniculum*, *Columella rustica*, &c., all forms that are common in the fauna of the Sarmatian etage. This observation explains the sudden appearance of brackish shells with marine ones in the same deposit, and accounts for the fact that, with very few exceptions, all coal-beds contain representatives of a brackish fauna.

Scarcity of Organic Life in the Alpine Flysch.—Dr. Carpenter and Mr. T. G. Jeffreys, it is well known, made the startling discovery that the great depths of the Mediterranean are entirely destitute of organic life, and they hinted in their report at the possible absence of all traces of life in the great sandstone zone of the Flysch, assigning to it a deep-sea origin. Th. Fuchs (*Verh. geol. Reichsanst. 1872, No. 2, 2*) controverts this view, and shows that the Alpine Flysch possesses an abundant, though monotonous, fauna of Annelida, while Fucoides are so plentiful that the zone has received the name of Fucoid sandstone. These remains clearly indicate a shallow-sea origin for the Flysch.

Alpine Formations in Eastern Transylvania.—The labours of the König. Ungar. geol. Anstalt (the Hungarian geological survey) during the last year demonstrated beyond doubt that the mountain-ranges dividing Transylvania from Moldavia are an eastern continuation of the Alps, or rather of the Bakonyer Wald, which is the eastern extension of the Alps. Between Transylvania and the Alps a tertiary sea covered the enormous tract of country now forming the plains of Hungary. Among strata yielding great numbers of Alpine fossils may be mentioned the Werfener shales, Guttenstein limestone (Trias), the Grestener and Hierlatz strata (Lias), and Lower and Upper Neocomian. (*Verh. geol. Reichsanst. 1872, No. 2, 27*.)

The Geology in China.—In a letter on the "Regions of Nanking and Chinkiang," by Baron von Richthofen, dated August 31, 1871, this indefatigable traveller and geologist gives a short sketch of the result of his geological investigations in China. He has distinguished the following groups:—1. *The Peking system*, which covers the largest space in Eastern Asia, and most probably corresponds with the Silurian formation of Europe and North America. Eruption of granite and great disturbances in connection therewith towards the end of this period are to be traced. 2. *The Nanking system*, representing our Devonian formation, consisting principally of quartz sandstones, with coal-beds, lead and iron ores. 3. *The Kitao limestone and coal formation*, which resembles the Carboniferous of Europe, and is divisible into two groups. 4. *The Tatung strata* consist of stratified conglomerates of unknown age, and seem to have been deposited as deltas of rivers. Over these again are loess and alluvium.

The Upheaval of the Swedish Coast.—Not far from Morup, on the Hålland shore, is a large block, ten feet high and fifteen feet broad, which served as a beacon as far back as the eleventh century. In September 1816 this stone was, according to the measurements of Bexell, four feet above high-water mark, and it still bears an inscription to that effect. It is stated in *Austral. 1872, No. 8, 191*, that this block of stone was last summer 120 feet from the shore, indicating a comparatively recent and rapid upheaval along this coast. In no historical records of this stone it is stated to have been actually in the water, but invariably at the water, from which it appears that the upheaval commenced with the present century, and is now rapidly progressing.

Physiology.

Mechanism of Thought.—An important paper was read at the last meeting of the Medico-Chirurgical Society on this subject, by Dr. Broadbent. His theory was based partly on the results of his own dissections, partly on remarkable cases of loss of speech and paralysis that either came under his own notice or have been recorded by others. It may be broadly stated as follows. The impressions derived from the several senses are conducted by fibres radiating from the *crus cerebri* and central ganglia to the convolutions of the longitudinal and Sylvian margins of the hemispheres, the intervening convolutions receiving no radiating or callosal fibres. In the former the impressions are associated together into ideas, whilst they become the subjects of thought in the latter. Now, when it is desired to express these trains of ideas in speech, impulses are transmitted along those medullary fibres of the brain that extend from the supreme centres to the third left frontal convolution. In this the ideas are formulated into words, as representing intellectual symbols, the centre selecting, as it were, the sounds appropriate to the expression of the idea. To produce the audible expression of these sounds, that centre again in its turn propagates impulses to the *corpus striatum*, the great co-ordinating motor centre at the base of the brain. In order to speak, a great variety of muscular movements required then have to be co-ordinated; those,

in short, governing the movements of the chest, the larynx, the tongue, and the lips. The co-ordination of these muscles is effected by the *corpus striatum*, which acts upon the requisite nerve nuclei in the *medulla oblongata*, and thus speech is effected. Lesions at different points of this chain of ganglia and nerves are of course accompanied by different symptoms, some of which are of a most remarkable character. The sequence of events on this theory then is: the formation of ideas in the marginal convolutions at the summit of the sensory tract; the employment of these in trains of thought in the convolutions withdrawn from immediate relation with the outer world; the propagation of excitations to the third left frontal convolution, leading to the selection of certain sound groups; the co-ordination in the *corpus striatum* of the muscular movements required to produce those sounds; and, finally, the transmission of impulses from the several nuclei of the *medulla oblongata* to each individual muscle required to be brought into play.

Position of the Centre of Gravity in Insects.—F. Plateau contributes a paper on this subject to *Nature* (Feb. 15, 1872), in which he shows that the centre of gravity in an insect is situated in the vertical and median plane which passes along the longitudinal axis of the body. It occupies a position almost identical in insects of the same sex and species when in the same attitude. The exterior form of the body, however, rarely allows its exact position being determined without experiment. The centre of gravity varies in position in the two sexes; and during metamorphosis the relative centre approaches the head, whilst the absolute centre recedes from it. While standing, the centre of gravity is placed at the base of the abdomen, or in the posterior portion of the thorax, and usually in the centre of the length of the body. In walking it undergoes constant displacement around a mean point too small to be measured. In aquatic insects the centre of gravity is nearer the lower than the upper surface of the body. F. Plateau also points out what are the displacements of the centre of gravity in flying and swimming.

The Influence of Violet Light on the Growth of Animals and Plants.—General Pleasonton, of Philadelphia, has been engaged on some very interesting experiments on the influence of light transmitted through violet glass in developing animal and vegetable life. Cuttings of vines of some twenty varieties of grapes were planted in a viney in the roof of which every eighth row of glass was violet-coloured. Very soon the vines placed under the violet glass began to attract attention by their rapid growth, attaining in the course of five months a growth of 45 feet in length, and an inch in diameter at the distance of one foot above the ground. Besides the formation of new wood, and the display of the most luxuriant foliage, there was a wonderful number of bunches of grapes, which soon assumed the most remarkable proportions, the bunches being of extraordinary magnitude, and the grapes of unusual size and development. The vines have continued, year by year, to produce remarkably large crops, without any apparent abatement of vigour. Similar experiments were tried on young pigs and calves, and though the results were not quite so striking, yet the animals exposed to violet light grew decidedly faster and showed greater vigour than those exposed to ordinary white light.

The Minute Anatomy of Serous Membranes in Health and Disease.—A provisional communication on this subject appears in the *Centralblatt für die medizinische Wissenschaft* for January 1872, from the pens of Dr. Klein and Dr. Burdon Sanderson. Their researches embrace experiments and careful microscopic observations made on no less than 250 animals, including rabbits and guinea-pigs, many frogs, several cats and dogs, some rats, and a monkey. They commence by describing the lymphatics of the central tendon of the diaphragm, which they divide into an anterior and a posterior set, connected by means of fine lacunar passages, which run straight from before backwards. They admit the presence of the same stomata and the characters of the endothelial cells to be the same as v. Recklinghausen has described. They injected the peritoneal cavity with various fluids, such as a mixture of starch and oil, a turpentine solution of alkanin reduced to fine drops by agitation with an aqueous solution of gum, aniline and oil of milk, and other fluids; and they have satisfied themselves that absorption takes place not only through the true stomata, but by pseudo-stomata, juice or serous canals, whence the absorbed fluids are conveyed to the true lymphatics.

Physiology of Wings.—Dr. J. B. Pettigrew's researches appear in the *Transactions of the Royal Society of Edinburgh*, vol. xxvii.; and a good abstract is given of them in the *Edinburgh Medical Journal* for Feb. 1872. The author shows that the wing acts as a kite during both the down- and up-stroke, and that it elevates and propels in either case—the rising and falling movements merging by insensible degrees into each other to form one pulsation. As the wing rises, the body falls, and vice versa; the wing, when the body of the flying animal is advancing in space, describes a *waved* track, the body describing a similar but smaller wave; the wing is twisted upon itself when at rest, and when in motion; the ill-defined impression produced on the eye by it, when set in rapid vibration, is concavo-convex and twisted in form. The under or concave surface of the wing, in being carried obliquely forward against the air by the body, is effective both during the down- and up-stroke; the wing rotates in the direction of its length and breadth as it rises and

falls, and reverses its places more or less completely at every stroke. It produces during one stroke the currents by which it is elevated during the succeeding stroke—the wing literally rising on a whirlwind of its own forming. The wing is movable and flexible as well as elastic, and capable of change of forms in all its parts; it is forced into waves during action, and impinges on the air as an ordinary sounddoes; it produces a cross pulsation, the pulsatile waves running in the direction of the length of the wing and across it; during vibration it moves on the surface of an imaginary sphere; the natural wing, when elevated and depressed, must move forwards; the movements of the wing are comparatively slow at its root, but very rapid at its tip. Balancing is in a great measure effected by purely mechanical arrangements operating independently of the will of the animal; weight is necessary to horizontal flight; the wing acts upon yielding fulcra; a regulating power is necessary in flight, the wing being at all times thoroughly under control. The wing in the bird descends as a long lever and ascends as a short one, the tip of the wing describing an ellipse while doing so; the wing forms a parachute, from which the body is suspended both during the down- and up-stroke; the wing opens and closes as it rises and falls, and has a valvular action; and all wings are drawn toward the body, and partly elevated by the action of elastic ligaments.

The Relative Powers of Substances to Prevent the Generation of Animalculæ.—A pamphlet has been published by Dr. J. Dougall, of Glasgow, giving in tabular form the accounts of a great number of substances which prevent the appearance of animalculæ when they are added to infusion of hay, mixtures of beef-juice and albumen of eggs, and other liquids capable of undergoing putrefaction. He arranges them in fifteen groups. The metallic salts form Group I. on account of their showing the highest average preventive power; amongst these sulphate of copper occupies the highest position—higher even than bichloride of mercury—whilst nitrate of silver exhibits the lowest individual average; taken altogether, however, the metallic salts are very uniform in their action. In Group II. we have the organic acids; of these benzoic acid has the highest and acetic the lowest average power; carbolic acid only occupies the fifth rank. Group III. comprises the salts of the alkaline earths; of these chloride of aluminium stands highest. In regard to the inorganic alkaline salts, their position would be extremely low were it not for bichromate of potash which is very high. The poisonous vegetable extracts are inert. These results, as Dr. Dougall points out, have an important bearing on the disinfecting method of treating wounds, so strongly advocated by Mr. Leslie, of Edinburgh; for, if the advantages of this method be due to the power possessed by carbolic acid of preventing the growth of germs, it is obvious that solutions of chromic acid, bichromate of potash, and sulphate of copper have the same property to a still greater degree, and should be employed in preference to that acid unless they can be shown to have some injurious influence on the tissues from which carbolic acid is free.

Chemistry.

The Reciprocal Substitution of Certain Metalloids.—Boracic acid and oxychloride of phosphorus, if heated together for eight or ten hours at 150°, have been observed by G. Gustavson (*Zeitschrift für Chemie*, vii. 417) to act on each other in the following way: $B_2O_3 + 2POCl_3 = PBO_4 + PBOCl_4$. When the reaction is complete, and the mixture distilled in a paraffin-bath, crystals sublime of $PBOCl_4$; a portion of them, however, decomposes during the operation into BCl_3 and $POCl_3$. The residue consists of PBO_4 , and is possibly only a mixture: $2PBO_4 = P_2O_5 + B_2O_3$; it is completely soluble in water from which boracic acid crystallizes out, leaving phosphoric acid with a little of the former acid in solution. By ignition this white residue is rendered insoluble in water, but it is taken up by boiling alkalies with the formation of salts of the two acids. The crystalline body $PBOCl_4$ is very readily formed direct from BCl_3 and $POCl_3$ by long sustained sublimation, but splits up into its constituents already at ordinary temperature, though but slowly in that case, with evolution of BCl_3 ; water and moist air immediately decompose it. If heated in a closed tube, it melts at 73°. This compound of two acid chlorides may be regarded as a salt in which BCl_3 in some measure plays the part of a base and $POCl_3$ that of the acid. If the chlorine be supposed to be replaced by oxygen, we have the body PBO , mentioned above. In a similar manner anhydrous phosphoric acid and chloride of boron, if heated together for two or three days at 200°, react on each other: $P_2O_5 + 2BCl_3 = PBOCl_4 + PBO_4$.

Animal Cellulose.—Since the first discovery of cellulose in animal tissues, by Schmidt in 1845, in *Ascidia mammillaris*, its occurrence under these conditions has been investigated by Löwig and Kölliker, as well as Payen in association with Dumas, Milne-Edwards, and Boussingault. Each of these observers extracted from the tissues a pure substance, containing no nitrogen, and giving numbers that accorded with the formula $C_{10}H_{10}O_6$. More recent observers have cast doubt on the identity of the cellulose from the two sources, while Berthelot, who obtained his material from *Cynthia papillata*, and found the pure

product identical in percentage composition with cellulose, though differing from it in its structure and behaviour with boron fluoride, considered it to be another substance than woody fibre, and gave it the name of tunicine. Schäfer has just communicated to the *Annalen der Chemie*, clx. part 3, 312, the results of an elaborate examination of the entire question. He derived his material from the tissues of *Pyrosoma atlanticum*, *Phallusia mammillaris*, &c., and establishes the identity of their cellulose with that met with in the vegetable kingdom by its possessing the following characteristics:—1. The percentage composition of vegetable cellulose; 2. The striking a violet-blue with iodine after previous treatment with sulphuric acid; 3. The solubility in cupriferous ammonia and subsequent precipitation with acid; 4. The formation of fermentable sugar with sulphuric acid; and 5. Its conversion by forming nitric acid into a nitro-compound which dissolves in a mixture of alcohol and ether, and resembles gun-cotton.

The Decomposition of Soluble Metallic Sulphides by Water.—J. Thomsen has been led by the results of his thermo-chemical researches to regard hydrogen sulphide as a monobasic hydrogen acid, with the formula H.SH, in which the first equivalent of hydrogen only is replaceable in the wet way by sodium or ammonium. Solutions of normal metallic sulphides, like that of sodium, are held to be mixtures of hydrates and sulphhydrates, the sulphur existing in the solution only as a sulphhydrate of the form R.SH, the radical SH occupying the position of chlorine in hydrogen chloride. From the analogy of hydrogen sulphide to water, he considered the latter to be a monobasic acid, and H.OH its rational formula. Many well-known facts support Thomsen's view: a hot aqueous solution of barium sulphide deposits on cooling crystals of barium sulphhydrate and barium hydrate. But, it is contended by H. Kolbe (*Chem. Centralblatt*, iii. 19), the crystals obtained on saturating one volume of strong soda solution with hydrogen sulphide, and adding a second to it, contain nine molecules of water, and they may be regarded either as $\text{Na}_2\text{S} + 9\text{H}_2\text{O}$ or, according to Thomsen, $\text{NaSH} + \text{NaOH} + 8\text{H}_2\text{O}$. If the latter view be the correct one, their watery solution, when heated with potassium sulphovinate, should form ethyl sulphhydrate, not ethyl sulphide. It was found by experiment that along with ethyl sulphide considerable quantities of mercaptan are produced, that the amount of ethyl sulphide was greatest when little water was used, and that the yield of mercaptan was augmented and that of ethyl sulphide diminished by increasing dilution. As the latter sulphide is obtained from even dilute watery solutions, they must of necessity contain a proportion of unchanged metallic sulphide. Thomsen's proposition, therefore, may take this modified form: the soluble metallic sulphides, by their solution in water, suffer a decomposition arising from the fact that the metals of these compounds possess for the oxygen of the water an affinity apparently nearly equal to that which they have for the sulphur, or varying but slightly from it, and in the case of each metal to a degree which has yet to be determined. Thomsen's hypothesis respecting the monobasicity of hydrogen sulphide and of water is therefore erroneous.

The Occurrence of Inosite in the Vegetable World.—Inosite was originally found by Scherer in the muscles of the heart, and afterwards discovered by other observers in the lung, liver, kidneys, and other organs of the body. Vohl was the first to meet with it in the vegetable world, in the Leguminosæ; and it has since been shown to enter into the constitution of the plants of other families. Lindenborn in 1867 detected its presence in wine, and Hilger (*Ann. der Chemie*, cix. 3. 333) has now found it to be a normal constituent of the juice of the grape. It was shown by Vohl that during fermentation inosite furnishes, among other products, lactic acid, though which of the two forms of this acid it gave, he did not determine. The point is one of interest, since lactic acid is a normal constituent of muscular tissue, and the theory has been frequently expressed that this lactic acid is derived from the inosite after muscular activity. Hilger states the acid formed from inosite to be para-lactic or, as it is sometimes termed, sarco-lactic acid.

The Reducing Action of Palladium Hydrogenum.—The very energetic manner in which black pulverulent palladium, which has been saturated with hydrogen, acts on organic compounds has been noticed by H. Kolbe (*Chem. Centralblatt*, iii. 19). He found, when benzoyl chloride is conducted in the form of vapour in a current of hydrogen over moderately strongly heated palladium, that a considerable portion of the chloride is converted, in the liberation of hydrochloric acid, into an oily body having the odour of oil of bitter almonds. It is unacted upon by dilute soda solution, furnishes but a small amount of a crystallizable compound with bisulphite of soda, and appears to be chiefly benzyl alcohol. If platinum be used in such experiments, no action takes place. Nitrobenzol carried over the palladium in a current of hydrogen is converted into aniline. The author is endeavouring to convert benzoic acid, or perhaps benzoic anhydride, into benzyl alcohol, and acetic acid into ethyl alcohol.

Native Phosphates of Lime.—In continuing his classification of the mineral species having this composition, T. Petersen (*Chem. Centralblatt*, 1872, iii. 24) notices the objections raised by Kosmann to considering staffelite a species distinct from apatite, as the investigations of Stein, Sandberger, and himself, indicate it to be. He maintains his previously

expressed view, and, pending the decision of the question of the crystalline form of staffelite, sees in other characteristics of the mineral sufficient cause for considering it an independent species. He finds confirmation of this view in a communication by Maskelyne and Flight on a Cornish mineral which differs from apatite in containing lime carbonate as an essential constituent. The author remarks that irrespective of the amount of water in this mineral, which differs barely from that met with in staffelite, the formula given to the Cornish mineral, $5\text{Ca}_3\text{P}_2\text{O}_{10} + \text{CaCO}_3 + 2\text{CaF}_2$, accords closely with the mean composition of a good many staffelites, and this mineral therefore is probably identical with staffelite. The author includes in the name staffelite all those basic lime phosphates of the form $\text{Ca}_x\text{P}_2\text{O}_7 + x\text{CaH}_2\text{O}$ (where x is about 1) in which the basic lime is in combination with fluorine or carbonic acid, and all or part of the water of hydration is still present.

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Philology.

Uttaracanda. Versione Italiana per Gaspare Gorresio. Parigi: dalla Stamperia Nazionale, 1870.

SIGNOR GORRESIO has at length completed his elaborate edition and translation of the *Rāmīyā*, according to the recension current in Bengal. The first volume of the text was published in Paris in 1843, and the title-pages of the different volumes curiously illustrate the changes which the twenty-eight years have brought in their course. The first three volumes of the text and the first of the translation were printed in the reign of Louis-Philippe, at the "Stamperia Reale," the fourth and fifth volumes of the text and the second of the translation, at the "Stamperia Nazionale," from 1848 to 1851; then follow the volumes "dalla Stamperia Imperiale," until this present volume, the last of the translation, which of course again returns to the "Stamperia Nazionale" of its earlier predecessors. It is also very interesting to read by the light of subsequent events the editor's own words in his preface to the fourth volume, published in 1848. He there mourns over Charles Albert's defeat and Italy's ruined hopes, and he adds, "io accarezava la speranza che questo volume più felice che i primi suoi fratelli dovesse uscire in sull' aurora dell' indipendenza e dell' unione italiana, e portarne impresso in fronte il fausto

segno : il cielo destinò altramente ; e il gioia di salutar nascendo l' Italia redenta e unita sarà forse destinata ad un altro fra i volumi che verranno dietro a questo." This last volume was printed just before these hopes were finally accomplished ; but as he promises us at some future time two more volumes (the 13th and 14th), on the Áryan civilisation and the early migrations of the race, his words will still come literally true.

The *Uttarakánda* bears the same relation to the *Rámáyana* as the Cyclic poems to the *Iliad*. Just as the *Cypria* of Stasinus, the *Aethiopis* of Arctinus, and the little *Iliad* of Lesches completed the story of the *Iliad*, and not only added the series of events which preceded and followed it, but also founded episodes of their own on isolated allusions in Homer, so the *Uttarakánda* is intended to complete the *Rámáyana*, and at the same time to supplement it by intervening episodes to explain casual allusions or isolated incidents which occur in it. Thus the early history of the giant Rávana and his family fills nearly forty chapters, and we have a full account of his wars with the gods and his conquest of Lanká, which all happened long before the action of the poem commences, just as the *Cypria* narrated the birth and early history of Helen, and the two expeditions of the Greeks against Troy ; and the later chapters continue the history of the hero Ráma after his triumphant return to his paternal kingdom, and the poem closes with his death and that of his brothers, and the founding by their descendants of various kingdoms in different parts of India.

But the *Uttarakánda* also resembles the Cyclic poems in their attempts to render the great epic cycle a self-interpreting whole by developing Homer's casual allusions into long episodes. Stasinus filled out the incidental mention of Achilles' attack on Æneas while tending the herds (*Iliad*, xx. 91), and the killing of Troilus (*Iliad*, xxiv. 257) ; and exactly in the same way we have several chapters in the *Uttarakánda* which seem entirely to have arisen from the natural desire to know the details of some event which the older epic had only glanced at in a passing mention. Thus Rávana always appears in the *Rámáyana* as borne by a magic self-moving car Pushpaka which he had won from Kuvera, the god of wealth ; the acquisition of this car forms the subject of an episode detailed in chapters ix. xiii. xiv. xv., and we have an elaborate description of the car itself in ch. xv. Similarly the friendship of the monkey-king Báli with Rávana is described in ch. xxiii., which is readily suggested by Ráma's friendship with Báli's rival Sugriva ; and in ch. xxxii. we have a legend to explain why Khara was sent by Rávana with his mother Súrpapakha and fourteen thousand Ráshas to occupy the Dandaka forest. Ráma of course subsequently meets them there, and his victory over them had been described in the *Rámáyana* itself. There are also some curious passages, where the later poem suggests explanations of apparent incongruities in the older epic. Thus in chs. xxxix. xl. we have a legend related to Ráma by the sage Agastya to account for the stupendous strength of the monkey Hanumat, as it had been described in the *Rámáyana*. Ráma naturally wonders (as perhaps many readers of the *Rámáyana* have done since) why a monkey of such marvellous power and prowess had not easily overcome Báli and secured the throne for his friend Sugriva. Agastya replies that Hanumat was at that time under a curse from a Rishi, and consequently was not conscious of his own might.

It is well known that there is a Buddhist version of the story of the *Rámáyana* which gives the earlier portion of the life of Ráma, down to his unjust banishment by his father into the forest, where he lives with his brother Lakshmana and Sítá, who, however, is represented as his sister,

not his wife. Prof. Weber has pointed out the close similarity between the two accounts, even to the incident of Ráma's slippers, which the brother, who remains as regent, places on the throne, when he has vainly tried to persuade Ráma to return from exile before the period prescribed by his father has expired. But the Buddhist legend has no mention of Sítá's rape by Rávana or the subsequent expedition to Lanká (Ceylon) and, the destruction of the ravisher. Prof. Weber has hence conjectured, with some plausibility, that this portion of the story as told in the *Rámáyana* is of later origin, and may be a reflex of some faint tradition of the *Iliad* derived through Bactria and the Græco-Bactrian settlements in the north-west of India. Prof. Kern has shown that the *Gárgi Sanhitá* (B.C. 50 ?), in its prophetical history of the Kali yuga, mentions Parásu-Ráma and the Mahábharata war, but it is entirely silent as to Ráma the son of Dásaratha. Perhaps the *Uttarakánda* may increase the likelihood of the hypothesis, as we here have an addition to the original legend which we cannot hesitate to ascribe to a later author, though Hindu tradition associates it with the sacred name of the inspired bard Válmski, just as Proclus says, Οἱ μέντοι ἀρχαῖοι καὶ τὸν κύκλον ἀναφέρουσιν εἰς Ὀμηρον.

Of the date of the *Uttarakánda* we are entirely ignorant, but it is at any rate older than the *Raghuvanśa* ascribed to Kálidása (A.D. 200 ?) if the later books of that poem belong to him. We need hardly mention the *Uttararámacharita* of Bhavabhúti (A.D. 720), which, though deviating in some particulars, generally follows the same tradition.

The poem itself is decidedly inferior to the better parts of the *Rámáyana*, and the legends introduced are generally childish in their ideas and ludicrous in their exaggerations. Some, however, are curious. Thus, in ch. xviii., Rávana is described as violently interrupting a sacrifice which is being performed by King Marutta, and the assembled gods in terror assume different shapes to escape. Indra becomes a peacock, Yama a crow, Kuvera a lizard, and Varuna a swan ; and each deity bestows a boon on the animal he had chosen. The peacock's tail recalls Indra's thousand eyes ; the swan's colour becomes white, like the foam of the ocean (Varuṇa being its lord) ; the lizard obtains a golden colour ; and the crow is never to die except when killed by a violent death, and the dead are to enjoy the funeral oblations when they have been devoured by the crows. In ch. lxiv. there is a curious dispute between a vulture and an owl, each claiming the original ownership of a nest. The vulture affirms that it had belonged to him ever since the earth had been peopled by mankind ; but the owl retorts that it had been his ever since the earth had been adorned with trees. Ráma, as umpire, accordingly decides in favour of the owl. This legend seems to have an affinity with the Buddhist fable in M. Julien's *Avadána*, No. lxxvii., where the elephant, the monkey, and the partridge dispute, under a pipal tree, which is the oldest and most venerable. The elephant remembered the tree when it only reached up to his belly ; the monkey when he could reach its top as he sat on the ground ; but the bird had himself dropped the seed from which it had sprung ! We have a similar story in the *Sindibád Námah* (see Falconer's analysis).

The finest part of the poem is undoubtedly the closing scene of Sítá's life. After her rescue from Lanká, Ráma had only consented to receive her on her passing unscathed through the ordeal of fire ; but after his return to Ayodhyá he learned from popular rumours that his people were still unsatisfied as to her innocence. To his own bitter distress he therefore resolves to send her away to the hermitage of Válmski ; there she bears her two sons, Kuśa and Lava, who are taught by the sage the great epic which celebrates

their father's exploits. Ráma, in course of time, hears of the poem, and when the boys are brought into his presence to recite it, he recognises them as his sons. He then sends for Sítá, and, to satisfy any doubts in the minds of his subjects, he promises to receive her again if she will once more solemnly call the gods to witness that she is innocent. But Sítá's heart was too full; this second ordeal was beyond even her power to submit to, and the poet rose above the ordinary Hindu ideal of women when he ventured to paint her conscious purity as rebelling.

"Beholding all the spectators, and clothed in red garments, Sítá, clasping her hands and bending low her face, spoke thus, in a voice choked with tears: 'As I, even in mind, have never thought of one other than Ráma, so may Mádhaví, the goddess of Earth, grant me a hiding-place. As in thought, deed, and word I worship only Ráma, so may Mádhaví grant me a hiding-place. As this word of mine is true that I love none other than Ráma, so may Mádhaví grant me a hiding-place.' As Sítá made this oath, lo! a marvel appeared! Suddenly cleaving the earth, a divine throne of marvellous beauty rose up, borne by resplendent dragons on their heads; and, seated on it, the goddess of Earth, raising Sítá with her arm, said to her, 'Welcome to thee!' and placed her by her side. And as the queen, seated on the throne, slowly descended into Hades, a continuous shower of flowers fell down from heaven on her head."

Both the great Hindu epics thus end in disappointment and sorrow. In the *Mahábhárata* the five victorious brothers abandon the hardly won throne to die one by one in a forlorn pilgrimage to the Himálaya; and in the same way, Ráma only regains his wife, after all his toils, to lose her. It is the same in the later Homeric cycle—the heroes of the *Iliad* perish by ill-fated deaths; and even Ulysses, after his return to Ithaca, sets sail again to Thesprotia, and finally falls by the hand of his own son. But in India and Greece alike this is an afterthought of a self-conscious time, which has been subsequently added to cast a gloom on the strong cheerfulness of the heroic age.

I may add that the name Kapila which occurs in the first book of the *Rámáyana* as that of the divine destroyer of the sons of Sagara, and of which Schlegel remarked in a note to his translation, "de hoc Vishnus cognomine non habeo quod expromam," is distinctly ascribed to Vishnu in the *Uttarakánda*, xxxi. 68. Kapila is the reputed founder of the Sánkhya philosophy, and is by his followers honoured as an incarnation of Vishnu (cf. Vijnána Bhikshu's *Comm. on the Sánkhya Sútras*, vi. 70); but the appearance of Vishnu under this name in this passage of the old poem seems to prove that the *Rámáyana* in its present form belongs to a date long subsequent to the rise of the Sánkhya philosophy. The mention of the name in the *Uttarakánda*, which is evidently intended to explain its older occurrence, proves the antiquity of our present text.

E. B. COWELL.

A Grammar of the Latin Language from Plautus to Suetonius.
Part I. Sounds, Inflections, Word-formation. By Henry John Roby, M.A., late Fellow of St. John's College, Cambridge.

MR. ROBY has conferred by this work a great service on all students of Latin, and especially on those in this country. The activity of German scholars in the field, not only of Latin grammar on its formal side, but of all philological study bearing upon it, has been of late both multitudinous and fragmentary, producing a number of works which are virtually elaborate monographs on special departments, but no complete summary bringing the results of modern research into focus. Such a summary, executed by a competent scholar

of independent judgment, is thus a real necessity for all, whether specially interested in the subject or not, who wish to gain, without waste of time, an insight into the present condition of this branch of Latin scholarship. Mr. Roby has neglected nothing which is necessary to the effective performance of such a work: and it should be observed in particular that he has turned thoroughly to account the labours of the most eminent phoneticians, so far as they can be used to clear up the more intricate problems of Latin pronunciation.

This would seem but cold praise for so thoroughly careful and able a book; but in truth at the present time a judicious writer on Latin grammar must feel that his most important task is to arrange and to summarize. A previous generation of philologists, when research was less minute, small difficulties less apparent, and the multitude of facts less obvious in its pressure, could venture more boldly on generalisation: "paupertas impunit audax." Now, the interest of speculation must for a time be put by, until greater certainty is achieved. The apprehension of giving an air of dryness to his work has not prevented Mr. Roby from concentrating his main attention on a clear and accurate exposition of the facts. His views often differ, indeed, from those generally received: but his tendency is rather towards scepticism than fresh construction. He has rigidly limited his field to the investigation of Latin: of Latin, that is, independently, so far as may be, of Sanskrit, Greek, or even the Italian dialects, which, he thinks, offer few results "sufficiently solid to allow one to rest any theories of Latin grammar upon them." This method gains in exactness what it loses in interest. The severe sifting of materials, of which Mr. Roby's book gives evidence, is a merit which deserves the more appreciation as it has been found that Corssen's lists often leave something to be desired in point of accuracy.

Besides the pains taken by Mr. Roby in the verification of facts must be noticed the excellence of his arrangement and the fulness of his lists. The general pathology of the various sounds is treated shortly in the chapter on the laws of phonetic change, their special pathology in Latin in the section on the various letters: an arrangement which saves considerable trouble and repetition. The declensions are properly distributed into two, not into five classes: and the arrangement of compounds in Book iii. according to the syntactical relation of their parts, is both sensible and ingenious. With regard to the lists of compound and derivative words, few readers will probably find them, as the author fears many will, "needlessly full." Such lists are, as he rightly judges, indispensable for the study of Latin formation. In the case of the verbs, Mr. Roby has made out not only a list of the stems (which, if given alone, might have seemed to bind the reader to his arrangement), but an alphabetical catalogue. The index might with advantage have been fuller.

The preface, in which Mr. Roby discusses a number of the moot points of grammar and pronunciation, will probably be found, to general readers, the most interesting part of the work. It will be convenient to follow him, point by point, in his own order. In the excellent section on *v* consonant, p. xxxii, he seems to us, in spite of Prof. Max Müller's letter in the *Academy* of December 15, to have completely made good the view which he has previously defended in these columns: and his treatment of *c* and *g* before *ae*, *e*, and *i* is equally satisfactory. His views on the etymological position of *f*, as expressed both in the preface and in the body of the work, seem more open to dispute. Mr. Roby says (p. xlvi):—

"The rare occurrence of *f* in suffixes goes far to show that the sound did not exist in the time when these suffixes assumed shape and use."

It may well be that *-bro* (in *candela-bru-m*, &c.) is of the same stock as *erre*, to bear; but if so, they are collateral relatives, and *-bro* is the earlier of the two. Similarly the verbal tense-suffixes *-bam*, *-bo*, &c., the derivative noun-suffixes *-bulo*, *-bili*, the case-suffix *-bi* in *tibi*, *-bis* in *nobis* and *vobis*, *-bus* in nouns, may very possibly have correspondents in Latin (or Umbrian or Oscan) beginning with *f*, but I should be inclined to regard such words with *f* as in a collateral, not a parental, relation to those with *b*: and thus *ama-vi* would not be for *ama-fui*, but it may contain a suffix from the same root as *fui*.

The facts, however, will, we think, better bear the ordinary explanation. Comparative philologists tell us that *f* in Latin mostly represents one or other of the Sanskrit aspirates *bh* and *dh*, the former of which is in Greek generally turned to *φ*, and the latter to *θ*. Stems beginning with *bh* in Sanskrit constantly begin with *f* in Latin: but, as contrasted with the Italian dialects, Latin exhibits a great aversion to *f* in the middle of a word, where it represents Sanskrit *bh* by *b*. The Umbrians could say *Tifernum*, but Rome was built on the *Tiber*: the *Safini* were called by the Romans *Sabini*: *Rufus*, *Alfius*, *Alfenus*, *Orfius*, were preserved as proper names, but *rubere*, *albere*, *orbis*, continued in use as words. Compare *sifilum* and *sifilare* ("quod nos, vilitatem verbi evitantes, *sibilare* dicimus," Nonius, p. 531) with their more usual forms, and the Umbrian *tri-fu* with the Latin *tri-bus*. It may be argued that where *b* in Latin answered to Sanskrit *bh*, it represented it as directly as *f* would have done: but it must be remembered that where the Romans had no objection to *f*, namely, at the beginning of a word, they used it as their representation of the Sanskrit aspirate, and it is therefore reasonable to suppose that they originally used *f* in the middle of a word as well, and subsequently let it degenerate into *b*. Certainly, supposing that they wished to make *fuo* a suffix to a vowel-stem, they could not, averse as they were to an *f* between two vowels, do otherwise than change the *f* into *b*: and then (as *bu* before a vowel was again no favourite with them) omit the *u* and write (say) *ama-bo*. To have written *ama-bi* for the perfect would in some persons have caused a confusion with the future, and in this case therefore the *b* was sacrificed. *Pot-ui*, which has usually been considered, on the analogy of *pot-eram*, *pot-ero*, to stand for *pot-fui*, and therefore be a crucial instance of *fui* as a suffix, is held by Mr. Roby (§ 725) to be equivalent to *potivi* (comp. *potior*, *potiri*). But it seems extremely doubtful whether the forms in *-vus* and *-ivi*, *-uus* and *-ui*, can be considered as identical, for the ordinary contraction of perfects in *-ivi* is not into *-ui* but into *ii*. *Vacivus*, therefore, and *vacuus*, *posivi*, *posui*, &c. are more probably distinct formations from the same stem.

It is very difficult to obtain evidence on the pronunciation of *s*. Mr. Roby differs from Corssen as to its having had a soft or flat sound between vowels: and perhaps the balance of argument may be said to be on his side. But we venture to think that Curtius' account (quoted p. lvi) of the lengthening of vowels before *-ns* is less open to the charge of unreality than Mr. Roby supposes. *N*, being itself vocal, will lengthen a preceding vowel if it can assert itself: it does so to a certain extent even when followed by a mute, and to a greater extent in proportion as it is less checked by a following consonant. Compare the quantity of *bet*, *bent*, *bend*: and again that of *yes*, *pence*, *pcns*. By lengthening the preceding vowel *n* often runs a risk of destroying itself, unless protected by a strong mute: thus *Gänse* became *geese*, *τυφθέται τυφθεῖται*. This, which is virtually Curtius' explanation of the matter, seems more natural than saying with Mr. Roby that "the *n* (in *-ns*) was scarcely audible, but that to compensate for this the Romans lengthened the preceding vowel . . . to signalise the fact of the syllable being more than the vowel + *s*." Indeed, the process usually described as "compensation" deserves altogether a

more minute analysis than it has generally received at the hand of grammarians.

In treating of the origin of *ss* (p. lvii, foll.) Mr. Roby is probably quite right in opposing Corssen's theory that in the case of supines like *tonsum* the process of contraction was from *tond-tum* through *tons-tum* and *tons-sum*, as a much simpler explanation can be given, that *tond-tum* became first *tond-sum* and afterwards *tonsum* (p. lx). The combination *st* is no doubt a stable one in Latin, and seldom passes into *ss*. Mr. Roby says never; yet it is difficult to go so far with him as this, and say that the common superlative ending *issimus* stands not for *is-timus* but for *ior-imus* (see § 755): that *levissimus*, for instance, was contracted from *levior-imus*. Is there, in the first place, any instance of such a contraction as *levis* for *leviōr* or *leviōs*? Such abbreviations as *victrix* for *victorix* are hardly parallel. And, secondly, the progressive assimilation of *st* into *ss*, to which Mr. Roby strongly objects, seems to have taken place in the participle *iussus*, formed like the perfect *iussi* from the stem *ius* (*iustus* retaining a different form to distinguish it from the participle). So *pustula* has another form *pusula* (= *pussula*?), which, had it been formed from the stem *pus* + *ulo*, would have been *purula*. *Assus* (dry or roasted), compared with the substantive *assura*, looks very like a participial formation, and, if so, must stand for *as-ius*, the stem being *as*, which in *arere* and *aridus* follows the ordinary rule of change from *s* to *r*.* Mr. Roby extends his theory to such forms as *acer-rimus* and *facillimus*, which he thinks stand not for *acer-timus* and *facili-timus*, but for *acerior-imus* and *facilior-imus*. But that *acerrimus* should stand for *acer-simus* (= *acer-timus*) is not stranger than that *torreo* should stand for *torseo*: perhaps *facillimus* and *simillimus* are formed directly from *facul* and *simul*: but, if not, it is easier to imagine them developed out of *facili(i)-simus*, *simil(i)-simus*, than by long degrees out of *faciliormus similiormus*. Mr. Roby, indeed, contends that *t* does not change to *s* after a single *l* or *r*, but only after a double one: yet it is doubtful whether the first syllable of *pul-sus* (comp. *peplūt*) be not the genuine form of the stem. Compare *percili* with *percello*.

On the question of the division of words into syllables, Mr. Roby departs from Madvig's doctrine that a consonant between two vowels belongs to the second vowel, holding that the tendency of Latin pronunciation is "to unite a consonant with the preceding, not with the following, vowel." Space will not allow of our entering into the wide-spreading minutiae of such a question, when there are other points, more interesting and definite, awaiting consideration: but it may be remarked that from the nature of the case it is hardly conceivable that uniformity was observed in the matter, and, further, that arguments from prosody and etymology are, in a case of this kind, apt to be fallacious. For instance, the fact on which Mr. Roby lays so much stress (§ 273), that vowels are often lengthened to compensate for the extrusion of consonants following (*exa-men* = *exag-men*, &c.) does not prove that the *m* "belonged" to the preceding vowel, but that in the pronunciation of the whole word it had more weight than the *g*.

The observations on noun-stems in *-e* and *-i* (preface, pp. lxxxii-lxxxviii) are among the most valuable in the book, and deserve attentive study as contributing much towards the solution of a difficult problem. The *-e* and *-a* verbs with perfects in *-ui* and supines in *-tum* present anomalies in dealing with which we think that Mr. Roby goes too far in his attempt to reduce them to uniformity. He assumes

* Merguet, in his able tract, *Die Entwicklung der Lateinischen Formenbildung*, starts an ingenious hypothesis that *issimus* stands for *i-sti-mus*, *-sti-* representing the root *-sto-*, which appears in forms like *κριτός*, *μέγνωρ*, &c.

(if we rightly understand §§ 688 and 693) stems in -ē and -ā throughout the verb (except apparently in the perfects of the -ā stems), so that he would make *monui* = *monē-vi*, *monī-tum* and *domī-tum* = *monē-tum* and *domā-tum*. It seems to us safer to assume consonant stems for the perfects (*mon-ui* not *mon(ē)-vi*, &c.), whatever may be the case with the present stems; and with regard to the latter, while the question of the -e stems may be put on one side as undecided, it is surely going too far to set up hypothetical stems in -ā, with the exception, of course, of *dā-tus*, *rā-tus*, *sā-tus*, and *stā-tus*. Wherever a appears in words like *crepare*, *sonare*, &c. it is long, as in the genuine -ā verbs both in Latin and Greek: and it is quite consonant to the analogies of the Latin language (which produced most of its -ā verbs on its own ground) to suppose that consonant stems like *ton-*, *son-*, *crep-*, &c. were lengthened by a long ā in the present and those parts of the verb which follow it, while preserving their consonantal character in the perfect and supine. Little can be made out from the supines in -itum as to the character of the present stem, as these supines, answering to perfects in -ui, are found affixed to stems unquestionably consonantal (*frem-itum*, *gem-itum*, *strep-itum*, *vomitum*). Some twenty are attached to -e verbs: of these some seem to have been adopted to avoid confusion with other verbs: * most of the rest are appended to stems characterized by l, m, n, or r.

Some remarks are necessary on Mr. Roby's treatment of the locative case in his section on inflexions. He says (p. 112): "Another case, distinguished in some other languages, called the *locative*, is in Latin always the same in form as either the genitive, dative, or ablative. Nouns of the first class (-a, -e, and -o stems) have the genitive singular (except in the pronouns), the locative singular, and the nominative plural (except in a few -e stems) alike. . . . Nouns of the second class (-u, -i, or consonant stems) have the locative usually the same as the ablative." Accordingly, *mensae*, *pueri*, *boni*, *animi*, *belli*, *equi*, are marked in the tables as genitive and locative: *nubi* as locative and dative: *rate*, *igni*, *imbri*, with their plurals as locative and ablative, *sus*, *artus*, and *gradus* being denied locatives altogether. There seems to be a want of clearness about this arrangement which might have been obviated had a distinction been taken at the outset between words locative in form and words locative in meaning: or (so to speak) between dead and living locatives. For words which are locative both in form and meaning, which have, that is, the proper locative ending -i and its meaning at the same time, are limited both in number and signification. They may be arranged as being words either of place, as *Romae*, *Carthaginī* (special), *ruri*, *domi*, *peregrī* (general), or of time (*tempori*, *die quarti*, *postridie*), or of action (*belli*, *militiae*). But in what author are *mensae* or *pueri* used as locatives (= *in mensa*, *in puerō*), as any reader would infer from Mr. Roby's declension-tables that they were? Again, to come to the -i and -u stems, *igni* and *imbri* require the preposition *in* to give them a locative sense, and are therefore as much ablatives as *campo* or *mensā*: nor is *nubi* more

a locative than *gradui*. And in any sense in which *equus* possesses a living locative, *sus*, *gradus*, and *artus* possess one, though none is allowed them by Mr. Roby. It would have added to the clearness of the grammar to have stated this difference accurately.

H. NETTLESHIP.

Notes and Intelligence.

Mr. A. Burnell is reported to have completed his catalogue of the large collection of Sanskrit manuscripts at Tanjore, undertaken at the order of the Madras government.

It is reported from Lahore that Dr. Trumpp, who has been entrusted by the Indian government with an English translation of the *Adi Granth* of the Sikhs, is about to return to Germany, there to complete a work so eagerly looked forward to by all who take an interest in the growth of Oriental creeds.

Bábú Rágendralála Mitra has issued the third part of his *Notices of Sanskrit Manuscripts discovered in the Bengal Presidency*, thereby completing the first volume. This fasciculus contains Nos. CCCLXII—DXIX; besides a classified Index of the titles of works contained in this volume.

A new magazine has been started at Geneva, under the title—*Atsume gusa, pour servir à la connaissance de l'extrême Orient*.

Mr. Whitley Stokes, Secretary to the Government of India in the Legislative Department, has presented to the Bodleian a copy (recently made at Benares) of the *Kaučika-sūtra* of the *Sāma-veda*. It has been ascertained that no other copy of this sūtra exists in Europe. Mr. Stokes has also presented to the University Library, Cambridge, a Persian manuscript containing the *Qaṣīdahs* of Nazīr of Naishāhpūr, the *Dīvudh* of the same poet, and the largest collection yet found (about 800) of the celebrated *Quatrains* (*rubā'iyyat*) of Omar Khayyām, the astronomer-poet of Persia.

Contents of the Journals.

Journal Asiatique, No. 66.—Personal pronouns in Egyptian, by M. G. Maspero.—Chapter of the preface of the *Farhangi Djehangiri* on dactyonomy, by M. St.-Guyard.—Ottoman bibliography, by M. Belin.—The *Fetwa* of Ibn Taimiyah on the *Nossairis*, published for the first time with a new translation, by M. St.-Guyard.—Letter to M. le Baron de Slane on three coins of generals of the Khalif Omar, by M. de Saulcy. Notices:—Querry's *Droit musulman*, by M. Barbier de Meynard.—The Catalogue of the Arabic MSS. of the British Museum; the Bengal Notices of Sanskrit MSS.; and Lewin on the Hill Tribes of Chittagong, by J. M.

New Publications.

ACTA SOCIETATIS PHILOLOGAE LIPSIENSIS. Ed. F. Ritschelius. Tom. I., Fasc. II. Leipzig : Teubner.

AESCHINIS in Ctesiphontem oratio. Rec. explic. A. Weidner. Leipzig : Teubner.

AESCHYLUS' Prometheus. Nebst den Bruchstücken d. Προμηθεύς Αὐτούρων. Erklärt von N. Wecklein. Leipzig : Teubner.

ALCHARIZI. Machberoth Ithiel, edited from the MS. by T. Chenery, M.A. Williams and Norgate.

BACHER, W. Nizami's Leben u. Werke. Leipzig : Engelmann.

DRÄGER, A. Historische Syntax der lateinischen Sprache. I. Thl. Gebrauch der Redetheile. Leipzig : Teubner.

FRAGMENTA HISTORICORUM ARABICORUM. Tom. II., continens partem VI., operis Tadjárobo 'l-Omámi. Ed. M. J. de Goeje. Leiden : Brill. **GROSS**, S. Menachem ben Saruk. Ein Beitrag zur Geschichte der hebräischen Grammatik u. Lexicographie. Breslau : Schletter.

LIEBLEIN, J. Hieroglyphisches Namen-Wörterbuch genealogisch u. alphabetisch geordnet. Leipzig : Hinrichs.

MARMONTEL. Bélisaire : enrichi de notes grammaticales par O. Fiebig. Dresden : Ehlermann.

PEILE, J. Introduction to Greek and Latin Etymology. 2nd ed. Macmillan.

ERRATUM IN NO. 42.

Page 77 (a), line 20 from bottom, for "John, King of Hungary, and Zapolya, Voyvode of Transylvania," read "John Zapolya, Voyvode of Transylvania, and King of Hungary."

The rest are *abolitum*, *calitum*, *caritum*, *dolitum*, *miseritum*, *monitum*, *solitum*, *valitum*, *libitum*, *nocitum*, *placitum*, *puditum*. We quote from Mr. Roby's lists.

* *Habitum*
iacturus
licitum
meritum
tacitum
territum
tuitum
veritum

might have been confused with

aptum,
iacturus,
licitum,
mersum,
tactum,
tersum,
tutum,
versum.

THE ACADEMY.

"INTER SILVAS ACADEMI QUÆRERE VERUM."

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Readers are reminded that the mention of New Books, Articles, &c., in our lists is intended as a guarantee of their importance. The Editor of THE ACADEMY cannot undertake to return communications which are not asked for. The next number will be published on Thursday, March 28, and Advertisements should be sent in by March 25.

General Literature.

The Works of John Hookham Frere. 2 vols. Pickering.

JOHN HOOKHAM FRERE was born of good and ancient lineage in 1769, and died in 1846. His life of seventy-seven years may be roughly divided into four chief periods. The period of youth was passed by him at Eton and Cambridge. In 1796 he entered public life as a friend of Canning, whom he succeeded in the Foreign Office on Canning's removal to the Board of Trade in 1799. In 1800 he was appointed envoy to Portugal; afterwards in 1802 he undertook the functions of envoy at Madrid, where, having failed to maintain the full confidence of the government, and being superseded in his post by Lord Wellesley, he abandoned his public career in 1809, and retired into a privacy from which he never again emerged. This date closes the second period of his life, to which belongs a good portion of his most famous literary productions, especially his share in the *Anti-Jacobin*. The third period embraces the years of his residence at Roydon, and of his marriage with Lady Erroll. In literature it is distinguished by the composition of *King Arthur and His Round Table*, the only work of complete originality which Frere produced. At the end of 1820 he left England, never to return to it for any lengthened stay. The last twenty-five years of his life were passed at Malta, which he visited at first for his wife's health, and which he never felt the inclination afterwards to quit. To this fourth period belong the translations of Aristophanes and the *Theognis Restitutus*, on which his literary fame is founded. On the whole, after reading the life of Frere, we are tempted to wonder at the small amount achieved when compared with the magnitude of promise—at the disproportion between the leisure enjoyed and the work done in it—at the richness of faculty and the comparative poverty of result. His biographers apologize by saying, what is true, that "he wanted the stimulus of ambition or of necessity to write, whilst his extreme fastidiousness disinclined him to regard anything he composed as finished." But this will not account for the phenomenon. The real truth is that the individuality of Frere was greatly inferior to his faculty as a *littérateur*. His taste was excellent, his command of language almost unbounded, his sense of humour considerable, his critical instinct delicate, his reasoning powers acute. But he had no real creative power; thoughts and emotions did not force themselves upon him and require expression; invention was neither a joy nor an imperative necessity to him. His real strength lay in translation; his taste and sympathy and wealth of diction made him a master in that department. Nor was he unsuccessful in such occasional verses as the political and social circles of London at that time highly relished—though here it must be admitted that at times he made mistakes of taste and judgment, as in the case of a stupid poem upon Landor, vol. i. p. 271. But

VOL. III.—NO. 44.

from all the higher regions of poetical invention he was excluded, not indeed by indolence, or by fastidiousness, or by want of ambition, but by want of special genius! The great exception to this criticism is the poem of *King Arthur and His Round Table*, written under the pseudonym of "Whistlecraft." In this poem, which is avowedly the precursor and model of Byron's *Bepo*, Frere invented a new style, and gave a humorous complexion to the octave stanza of Fairfax. Nothing stronger in his praise can be spoken than the simple fact that without "Whistlecraft" the world would probably have never known *Don Juan*. But Frere's talent could not carry him beyond the creation of the form. He had nothing particular to say. His poem was not a romance or a satire, an ingeniously constructed comedy or a political allegory. It was a tale of knights and giants in an age when chivalry was so dead that nothing could be gained by laughing at it. People naturally looked for some object in the poem, for some thread of interest or meaning underneath its veil of exuberant phraseology and mask of fun. They would not accept it as a simple burlesque: perhaps they might have been ready to do so, had the scene and characters been modern and familiar; but *Monks and Giants* failed to arrest their attention. Therefore Frere abandoned the poem at the end of the fourth canto. His own view of the purport of the burlesque is admirably expressed in a passage quoted at p. 158 of the Memoir. The quaint wit, the wealth of language, the power over metre, first displayed in all their fulness by the pseudo "Whistlecraft," were destined to do the world nobler service in the translation of Aristophanes. There thought, invention, meaning were supplied by the Greek poet. Frere did what no man but Frere could do: he gave an adequate expression in the English tongue to all the many-sided moods of his great master.

The full publication of Frere's versions of the *Frogs*, the *Acharnians*, the *Knights*, and the *Birds* of Aristophanes, together with his Essay on Aristophanic translation, is an invaluable contribution to English literature. Of all Athenian poets, Aristophanes is the one who brings us most closely into contact with the facts of actual Greek life. To understand his allusions, and to appreciate the point of his situations, requires a mastery over antiquarian details, and a sympathy with the spirit of the ancient world, which are rarely to be met with among modern students. At the same time, the imagination of Aristophanes is so gigantic, his machinery so huge, his humour so audacious, the scope and purpose of his comedy so profound, that no one but a poet by nature can hope to grasp his meaning in its fulness. Scholars and critics and historians of literature have failed where Frere has succeeded with the facility of inborn mastery. His command of the universe of Aristophanes is nowhere shown more vividly than in the introductions and interpolated explanations by which he assists the imagination of his readers. These place the student at the proper point of view, illuminating the history and opinions of the time, indicating the drift of the poet's conception, and connecting his inventions with the realities they adumbrate. Then follow passages of light elastic verse, in which the lyrical beauty, the *buffo* garrulousness, the satiric pungency, the comic absurdity of Aristophanes, are successively revealed through the Cðan gauze of imitatively sympathetic translation. Avoiding on the one hand the dulness of *faithful translators* who try to render word for word, and on the other the specious parade of *spirited translators* who distract the mind by tasteless introduction of modern phrases, Frere realises the ideal of the *lawful and true translator*, which he has so ably set forth in his article on Mitchell. There he says: "The language of translation ought, as far as possible, to be a pure, impalpable, and invisible element

the medium of thought and feeling, and nothing more; it ought never to attract attention to itself." To prove from his version of the *Birds*—which of all the comedies of Aristophanes best lends itself to reproduction, owing to its universal and highly poetical character—how Frere has applied in practice his own canons of criticism, would be an easy and a pleasant task. We must, however, leave this pleasure to the readers of his book; for to quote from a work so connected, and of so consummate excellence, is nothing but to mutilate. Yet if one example of Frere's style must be given, let us take the song which the hoopoe sings to lure the nightingale from her thicket (p. 150):—

" Awake! awake!
Sleep no more, my gentle mate!
With your tippy tawny bill
Wake the tuneful echo shrill,
On vale or hill;
Or in her airy rocky seat,
Let her listen and repeat
The tender ditty that you tell,
 The sad lament,
 The dire event
To luckless Itys that befell.
 Thence the strain
Shall rise again,
 And soar amain,
Up to the lofty palace gate,
Where mighty Apollo sits in state
In Jove's abode with his ivory lyre,
Hymning aloud to the heavenly quire;
While all the gods shall join with thee
 In a celestial symphony.
(*A solo on the flute, supposed to be the nightingale's call.*)
Peis. Oh, Jupiter! the dear delicious bird!
 With what a tone she swells and falls,
Sweetening the wilderness with delicate air."

In all his translations, Frere was not so successful as with Aristophanes. The simple brevity of *Theognis* and the exquisite art of Catullus are better suited to a different method of work—to that close rendering of form and phrase, for instance, of which Rossetti has given masterly specimens in his translations from Villon and the early Italian lyrists. Yet if we examine closely the whole texture and composition of the *Theognis Restitutus*—a biographical sketch and critical commentary, in the midst of which the translations from that poet are embedded—we find a new illustration of the peculiar qualities of Frere's genius. In this remarkable work of combined imagination and scholarship the fragments of the Megarian moralist—about 1389 lines, reckoning by Bergk's collection—are arranged for the first time in a connected order, so as to illustrate the supposed biography of the poet, and to throw light upon the history of Greece under the despots. It is just in such a work that Frere's powers showed to best advantage. His fancy, which needed an external stimulus, working in combination with his acute reasoning faculty and with his great erudition, enabled him by a kind of critical magic to construct a romance out of the *disjecta membra* of one who commonly passes for the driest of moralising poets. It may be doubted whether Frere has rightly stated or brought into sufficient relief the relations of *Theognis* to Kurnus, or whether some of the elements which he regards as purely autobiographical may not have had their origin in the fashions of the Dorian Syssitia. Anyhow, as the Italian proverb runs, the whole *se non è vero, è ben trovato*.

Thanks should be rendered to the editors for the complete and faithful execution of their work. The Memoir may indeed appear too long, especially in its excursus upon Spanish affairs (pp. 57–137), and in its quotations from an article of Mr. Charles Norton—an American critic, who is far from underrating Frere's original genius. But all the details about the life of this highly cultivated gentleman in his

elegant retirement at Malta—the model, we may say, of an intellectual and aristocratic existence that has almost passed away—will be read with great interest by those who care to remember what the Englishmen of the beginning of this century were.

J. A. SYMONDS.

History of the Ragusan Drama. [*Historia Dubrovacke drame.*] By Professor Arnim Pavich; edited by the South Slavonic Academy. Agram, 1871.

FROM the beginning of the sixteenth to the middle of the eighteenth century Dalmatia has been the centre of a remarkable movement in Slavonian literature with which the east of Europe and even the Slavonians themselves long remained unacquainted. To take only one example, the famous Mickiewicz omits all mention of it in his *Course of Slavonian Literature*. The history of this literary movement has only begun to be studied seriously within the last twenty years by the Slavonian *savants* who have their centre at Agram; and the results of their studies have amply demonstrated that the Croatian people do not deserve the reproach of barbarism which has been very unjustly addressed to them. The chief focus of these researches is at present the South Slavonian Academy of Agram, which, founded in 1867 under the auspices of Bishop Strossmayer, has ever since displayed a praiseworthy and fruitful activity. It has applied itself especially to the task of bringing to light the works of Dalmatian writers, some of which can only be met with in editions of great rarity, while a few have never been published at all.

The literary language in which these productions are written is a Slavonic dialect, identical with the present Croatian, if we allow, that is, for the variations to which a living language is subject in the course of time, and for the special influence exercised by the dominant Italian language in a part of Dalmatia. The Croatian dialect itself tends more and more to approximate to the Serbian, so far as its literary use is concerned, and at the present day a difference in their alphabets is all that separates the two idioms (or what pass for two), as is proved by the fact that certain works are printed in both alphabets, as, for instance, the Bible published by M. Danicich, at the expense of the Bible Society, which has two different editions printed in different alphabets from a uniform text.

There are no signs of national literary activity in Dalmatia before the fifteenth century. A few documents and the poetical genius of the Slavonic race make it probable that the country always possessed some popular poets like those belonging to other Slavonic tribes, but the refinements of a civilisation borrowed from Venice and Italy led to the neglect of the popular muse. In the fifteenth century, under the influence of the renaissance, the literary movement declared itself suddenly and almost simultaneously at Spalato, at Ragusa, and in some of the islands bordering on the coast. The movement was exclusively poetical, and prose composition was still neglected. Most of the poets who made their appearance first at Spalato, towards the end of the fifteenth and beginning of the sixteenth century, wrote indifferently in Latin, in Italian, and in their native tongue, which they call sometimes Illyrian (*illirski*), sometimes Slavonian (*slovinski*).* In the sixteenth century the literary school of Dalmatia established its head-quarters definitely at Ragusa (Dubrovnik). Ragusa, the Slavonian daughter of the ancient Epidaurus, was then one of the most

* Even at the present day in Dalmatia the Austrian authorities affect to call the Croatian language *lo slavo*. The Dalmatian peasant, if he is asked what language he speaks, answers readily: *Coverim naski*, "I speak our language."

flourishing cities on the basin of the Mediterranean ; her vessels ploughed the seas, she maintained diplomatic relations with Hungary, Turkey, and the Italian republics ; Venice and Genoa were her rivals, and like those great commercial cities she had an aristocratic and wealthy population fond of pleasure and all the elegancies of life. In such a centre the theatre was sure to be cultivated with enthusiasm. Accordingly, in the course of two centuries we find no less than twenty-eight known dramatic poets, without counting anonymous authors ; and M. Pavich, the author of the work we are considering, analyses no fewer than 116 dramas written during this period. Most of these are still in manuscript, and are to be found in the Library of Agram, and in some public and private collections in Dalmatia ; 76 of the dramas rescued from oblivion by this patient compiler are by authors now unknown.

M. Pavich has divided his work into four parts : in the first he examines the dramatic school of Spalato and the island of Hvar (called in Italian *Lesina*) ; in the second, the Ragusan drama of the sixteenth century ; and in the third and fourth, the Ragusan drama of the seventeenth and eighteenth centuries.

It is rather difficult to follow the author through the confused and slightly disjointed mass of analyses on which he has expended so much industry. One fact which the whole of his book brings into relief is the immense influence of Italian upon Dalmatian literature. The first works which he mentions at Spalato are only imitations of Italian authors long since forgotten, Feo, Belcari, Antonio Aralda. They are a kind of mystery or religious drama, to which, when the Italian original is missing, it is easy to find parallels in other European literatures, as, for instance, in the French piece *Débat du corps et de l'âme*, a subject, by the way, which had already been treated in Czech literature in the middle ages. Certain stage directions added to the manuscript lead us to suppose that the pieces were acted either in the principal church or in the open market-place of the town. The rhythm of these first attempts is clumsy, and the verse consists of eight syllables. Some of the dramas are long, containing as many as 2000 lines, and, as may be supposed, the dramatic interest is sufficiently slender ; the laws of probability are not much regarded ; an angel recites the prologue and the epilogue, which bears some resemblance to the end of a sermon. Here, for instance, is the epilogue of a piece on the history of Joseph and his brethren ; it is the angel who speaks :

" You who have been here to-day,
And have seen the deeds of Joseph,
May God give you his blessing,
And [entertain] you ever in joy,
And forgive you your sins,
And give you paradise joys,
In this world a good condition,
In that the state of paradise."

The subject of another piece is the Annunciation of the Virgin Mary ; the Sibyls play an important part ; angels, Lucifer, and Leviathan appear ; some parts recall an Italian piece by Belcari, others are altogether original. In another drama St. Stephen, who recites the prologue, indicates clearly where the representation is being held : " Good people of Hvar, you who have come into my church, listen to what I am going to say." The church is mentioned in the same way in another drama on the martyrdom of St. Cyprian. On the manuscript of *The Martyrdom of St. Lawrence* there is the following note in Italian : *Al dì 15 di Agosto 1614 fu recitata in città vecchia la prima parte; così pure tutta intiera li 16 al giorno di San Rocco fu recitata in pubblica adunanza.*

According to M. Pavich the general tone and style of

these pieces is what differs most from corresponding Italian works ; one feels, he says, that while these are written for aristocratic circles, the Dalmatian pieces are intended for the people ; the angel of the prologue often expresses a hope that God will cause the crop and vines to prosper.

The most original drama of this period is due to a writer named Lucic, and represents the adventures of a young Christian girl carried off by the Turks and happily rescued ; the piece is thoroughly national, and besides the usual love intrigue we find in it interesting details relating to the local manners. It is called *Robinja* ("The Slave").

In the Ragusan period, properly so called, religious dramas are less numerous, and the form is more carefully studied ; they are written in distichs, which rhyme at the end of the line and of the hemistich—

" Blazene dusice | hodite vi k meni
iz vječne tuzice | u pokoj blazeni."
" Happy souls, come to me
From eternal sorrow to a happy peace."

This is the favourite measure of the Dalmatian poets, and presupposes a rich and very flexible language. It appears from a prologue that these dramas were represented in the open air.

Secular or profane tragedy began at Ragusa with translations. Some pieces are called by ancient names, such as Hecuba, but on examination they prove to be founded on Italian imitations. In some cases the Italian original is unknown, and the learned had a very delicate problem to resolve, whether, namely, we were in the presence of a piece translated from some ancient play since lost. This hypothesis does not appear probable to M. Pavich. Amongst translations of well-known Italian dramas we may quote Tasso's *Aminta* and the *Pastor Fido* of Guarini. The taste of the Italians at that time for Pastorals is well known, and several Ragusan poets attempted flights in this style upon their own wings. Amongst those who distinguished themselves in this way the names of Vetranić, Naljescovich, and others, are cited ; their subjects are sometimes borrowed from Greek mythology, sometimes from the imagination of the author ; they are generally short dialogues in graceful and poetical language.

At the same time, other poets tried their skill in original comedy. Some of their attempts are of an elementary simplicity, others are interesting for the study of local manners, but the dialect is hard to be understood even by the descendants of the ancient Ragusans ; it bristles with maccaronic Italianisms, and there are occasional traces of the obscenity which disfigures the Italian comedy of the period. These pieces were acted by companies of young people and amateurs ; some of them are in prose.

In the seventeenth century the greatest of the Ragusan poets makes his appearance, Gundulich, whom the Italians call Gondola. He is chiefly famous for his long poem on the *Osmanide*, which has caused him to be compared to Tasso and Ariosto. The language reaches its highest perfection in his works. Amongst his dramas *Ariane* is the most admired, especially the choruses, which are excellent as lyrics ; it is imitated from an Italian opera of the time, and other "classical" pieces are also Italian reminiscences. The only really original piece by Gundulich is an allegorical pastoral in honour of Ragusa. The contemporary and rival of Gundulich, Palmotich (Palmota), the author of a great epic poem on Christ, shows some *naiveté* and talent in his attempts at original tragedy. The dramatic element is what his works are most deficient in ; they are narratives in dialogue, for which Tasso, Virgil, Ovid, &c. furnish the subjects. The author also borrows largely from Ariosto (especially in his use of the marvellous) ; his works are

interspersed with songs and dances, and, when the occasion offers, with flattering allusions to the glory of the writer's country.

In 1666 the city of Ragusa suffered from an earthquake which greatly affected its prosperity, and the theatre shared in the common decline. From that fatal date down to the fall of the republic (1806) we find only nineteen dramas, and these of little merit. M. Pavich analyses them conscientiously, and we cannot but be grateful to him for his labour, but we will not abuse the reader's patience by dwelling on this period of decadence. M. Pavich concludes by enumerating the names of eight societies of amateurs who used to give representations in Ragusa; their titles resemble those borne by the Italian academies. In taking leave of this meritorious and instructive work we must express a hope that it will be utilised by all future historians of the theatre, and that some Dalmatian *littérateur* may be found to publish an Italian translation (or abridgment) which would place it within the reach of the European public.

For the rest, most of the dramatic works analysed by M. Pavich will be published in the course of a few years by the Academy of Agram, which has already edited three volumes of the ancient authors of Dalmatia, and is still continuing their publication.

LOUIS LEGER.

English-German Lexicon. [Englisch-Deutsches Supplement-Lexikon, als Ergänzung zu allen bis jetzt erschienenen Englisch-Deutschen Wörterbüchern, insbesondere zu Lucas. Von Dr. A. Hoppe.] Berlin: G. Langenscheidt.

An exhaustive English dictionary, or at least a word-list with examples, is one of those unwritten books some vision of which has probably floated before the eyes of every student of our tongue. At first sight it does not seem that such a compilation presents any very overwhelming difficulties, but further consideration shows that to form a verbal key to a literature so large as ours is well nigh an impossible achievement. The range is so vast, and the new words which trade, science, and, more than all, the newspapers are introducing day by day are so many, and for the most part so uncomely, that a man must be possessed not only of gigantic working powers, but also of an immense and peculiar range of thought and taste to be able to grasp them so as to give a fairly trustworthy interpretation. We do not believe that such a work can ever be thoroughly accomplished; but that some parts thereof that are at present neglected should be undertaken is a bare necessity if men are to continue to understand what they read.

A foreign word-hunter has some advantages over one who has spoken our language from childhood. He at once catches a new word, because, if it be not in his dictionaries, it is almost sure to be unknown to him, whereas to the Englishman it will probably be far more familiar than many of those classic compounds which are in all the standard authorities from Johnson downwards, but are hardly ever heard out of them, except when some half educated person is anxious to make an impression by the fineness of his diction.

Dr. Hoppe has undertaken to do for German students of English what no Englishman has as yet performed for his own countrymen. He has read, as we suppose, pencil in hand, the writings of most of our popular novelists and other books of light literature that are not works of fiction, and has marked the uncatalogued words, reduced them into alphabetical order, and given specimens and his own interpretation of each. Books are not the only field in which this careful gleaner has wandered. *The Times*, *The Daily Telegraph*, and *The New York Herald*, are also quoted as authorities. The motto on the title-page,

"All is fish that comes to net,"

fully describes the nature of the collection. Nearly everything Dr. Hoppe's net has brought to land has been worth catching. Perhaps indeed there is nothing in the book that may not be useful to a foreigner. Some few of the words, however, seem out of place, from the fact that the special meaning for which they are inserted here differs by so slight a shade from the ordinary one given in all the dictionaries. Take for instance BELT in its secondary meaning of a belt of trees. We have it defined thus: "Auch ein runder, rings von Bäumen eingeschlossener Platz in einem Gehölz," and its use is further illustrated by quotations culled from the writings of Dr. William Howard Russell and the author of *Guy Livingstone*. It seems odd also to meet in a dictionary of words with names of persons and places, such as Pall Mall, Beau Nash, Petticoat Lane, Lindley Murray, and Palmetto State, but the information given under each of these and their companions is undeniably accurate and useful. These and the like redundancies, if they be indeed blemishes, are errors on the right side, and will readily be excused by those who object to them, occurring as they do at rare intervals among a very large mass of useful and minute information.

No slight service has been done by reducing so large a mass of stray words into alphabetical order. Had Dr. Hoppe contented himself with picking his recruits out of the mob and forming them into an orderly regiment, we should have thanked him, but he has done far more: he has given us a long array of useful examples and a series of explanations singularly free from error.

EDWARD PEACOCK.

TO THE EDITOR OF THE ACADEMY.

SIR,—In a late review of the very useful little book which has been brought out by Professor Seeley and Mr. Abbott, *English Lessons for English People*, you call particular attention to the chapters on Prosody. I have been reading these with some care, and while agreeing with much and finding much to admire, here as in the rest of the book, I venture to think that their statement of the laws of metre is in some points open to criticism. Not to encroach too much on your space, I will confine my remarks to the consideration of the irregularities admissible in the English Heroic Metre. The typical form of this metre is a line of ten syllables, with the accent falling on each even syllable, each pair of syllables making a so-called iambic foot; the pause falling at the end of the line, and each foot ending at the end of a word. But a long series of lines formed precisely on this model would be found intolerably monotonous. The poet, therefore, seeks to vary it, both in respect to the number and accentuation of the syllables and in respect to the pause and break. Of this last mode of varying the rhythm I shall not speak, as it is treated with sufficient fulness in the *Lessons*. I proceed to consider the other ways in which variety is produced.

A. Variation in the number of syllables. Perhaps the irregularities under this head might be more simply classified as follows:—

(a) Variation by excess.

I. The addition of a superfluous syllable or syllables at the end of a foot.

I. Usually the final foot (the so-called *female rhythm*), as—

That durst | dislike | his reign | and me | prefer | ring.
To you | our swords | have lead | en points, | Mark An | tony.

2. More rarely after other feet, as—

Except | immor | tal Cæ | sar, | speaking | of Brut | us.
Took it | too ea | gerly— | his sol | diers fell | to spoil | .

Where there are two superfluous syllables, the first syllable is more or less slurred.

II. The interpolation of a syllable within the foot.

I. Preserving the distinct sound of the extra syllable, as—

With impe | tuous | recoil | and jar | ring sound | ,
The sound | of man | y a heav | ily gal | loping | hoof | .

2. Slurring the extra syllable, either within a word, as—

Whom reas'n | hath e | qualled, force | hath made | supreme | ,

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or at the end of a word before a following vowel (*elision*), as—

Towards thee, | I intend, | for what | I have | misdone |.

Also where the same sound is repeated, we find elision in Milton, as—

Justly yet | despair | not of | his fi | nal par | don, (S. A. 1171)

and possibly in the following—

In e | qual ruin | into | what pit | thou seest |.

Sometimes it may be doubted whether we should explain the scanning of a line by the supposition of an elision or slurred syllable, or of a superfluous syllable at the end of the foot or an extra syllable in the foot. Thus, in the line—

Of riot | ascends | above | their lof | tiest towers |,

while there is no doubt of the slurring in the last two words, *riot* may be either treated as a monosyllable or as a dissyllable, whose second syllable is either metrically superfluous or is to be joined with the following word and make a trisyllabic foot. The same explanation is applicable to the word *ruin*, above.

(b) The next variation is that produced by *defect* in the number of syllables. This is well treated by Mr. Abbott in his *Shakespearian Grammar*, but hardly touched on in the *Lessons*. It is of course more common in dramatic than in narrative poetry, but I am not sure whether Milton has not employed it at times, e.g.—

Shoots | invis | ible vir | tue e'en | from the deep |,

unless we take this as a case of double trochee, discussed below.

B. It is in reference to irregularities of accentuation that I am most disposed to question the view given in the *Lessons*. Children or uneducated persons naturally read any iambic line with a sort of sing-song, emphasizing the accent on the alternate syllables without regard to the ordinary or prose accent of the separate words. An educated person feels this to be injurious not only to the sense, but to the sound also; and in his reading of poetry he gives to each word its own pronunciation without losing the consciousness of the general iambic rhythm. It is this educated reading of poetry which supplies the basis and test for our technical systems of prosody. Prosody has in the first instance to describe in simple and precise terms the rhythm of any passage as given by a good reader; and next it has to ascertain the general and special laws of the metre as employed by the poet and interpreted by the reader.

It seems to me that there are two different principles on either of which the facts of any metre may be consistently explained. A distinction may be made between the metrical accent and the natural emphasis of a syllable; and it may be maintained that the metrical accent is always present, but that it varies in force as it coincides with the natural emphasis. This is what I should call the artificial system. On the other hand, no accent except that of natural emphasis may be recognised. This I should call the natural system. It should be remembered, however, that the exigency of rhythm may sometimes require stress to be laid on a syllable in verse which it would not have in prose. For this the poet is responsible. The natural system simply professes to reproduce or stereotype his reading.

The two systems may be exemplified in the following lines:—

- (a) Then tore | with bloo | dy ta | lon the | rent plain |
- (b) Rocks, caves, | lakes, fens, | bogs, dens, | and shades | of death |
- (c) 'Tis sure | the hard | est sci | ence to forget |
- (d) Comfort, | my liege; | why looks | your grace | so pale? |

It is plain that all these lines depart from the typical 5-foot iambic metre. The natural system would describe the irregularity of (a) as consisting in an unaccented eighth and accented ninth syllable; that of (b) as consisting in the accent on the first, third, and fifth syllables; that of (c) in an unaccented eighth syllable; that of (d) in an accented first and unaccented second syllable. The artificial system maintains that in (a) the *the* is accented though unemphatic, and *rent* unaccented though emphatic; that in (b) *rocks*, *lakes*, and *bogs* are long in quantity, but unaccented; that in (c) *to* is accented; and in (d) the first syllable of *comfort* is emphatic but unaccented, and the second accented but unemphatic. In the *Lessons* the artificial system is that which is generally followed, but in lines of the type (d) it is abandoned for the natural system. The trochee is recognised as belonging to the iambic metre. But if this is so, why not recognise the spondee in lines of the type (b), and the pyrrhic in lines of the type (c)? The reason for calling *comfort* a trochee is that a good reader lays more stress on the first than on the second syllable. For the same reason the name of spondee must be conceded to the three feet, *rocks*, *caves*; *lakes*, *fens*; *bogs*,

dens: no good reader would make any difference in the stress he laid on the first and second syllables in each. I do not imagine any one would be found to dispute this, but perhaps the line—

Kill, fire, | burn, slay, | let not | a traitor live |

is a still stronger case in point. Similarly the fourth foot of (a) and (c) ought to be called pyrrhics. A good reader would, if anything, lay less stress on *the* and *to* than on the preceding syllables.

Following, then, the natural system of accentuation, I should classify irregularities as arising from (a) excess, (b) defect, or (c) transposition of accent in the same foot.

(a) Excess of accent is shown in the substitution of the spondee for the iambus. That this deserves at least as much attention as the substitution of the trochee will appear from the examination of a few lines of Milton. Thus, in the first hundred lines of the *Paradise Lost*, I find forty-two spondees compared with twenty trochees; and this prevalence of the spondaic rhythm greatly contributes to the stately and solemn tone of Milton's poetry.

(b) Defect of accent appears in the substitution of the pyrrhic for the iambus. The effect of this is to throw additional weight on the next emphatic syllable.

(c) Transposition of accent appears in the substitution of the trochee for the iambus. In the *Lessons* two laws are laid down with regard to the use of the trochee in iambic metre: (1) that a trochee cannot follow upon a trochee, (2) that a pause or at all events a long syllable is necessary before a trochee. With regard to the former, it is stated that "it is usual to quote as an exception Milton's line,

Un | vērsāl | reproach | far worse | to bear |,

but that such a line would be a monstrosity, and it is far more likely Milton pronounced *ūversāl*." If this were really the only line in Milton where the double trochee occurred, there might be some excuse for trying to explain it away, though it is hardly likely that the word *universal*, of which Todd quotes twenty other examples from Milton, all used with our present accent, could have been pronounced differently in this one case.* But the fact is, this line is by no means an isolated case of the double trochee. Compare—

P. L. vii. 518. Present, | this to | his son | addi | bly spake |
P. L. vii. 533. Over | fish of | the sea | and fowl | of the air |
P. L. iii. 750. In their | trifle | degrees; | régions | to which |
P. L. iii. 586. Shoots in | vīsi | ble vir | tue even | to the deep |

[Unless this line is taken, as suggested above, with a mono-syllabic foot.]

P. L. xi. 377. In the | visions | of God. | It was a hill
P. R. i. 175. Butt to | vanquish | by wi | dom hel | lish wiles |
P. R. ii. 243. After | forty | days' fas | ting had | remained |

the last a much harsher line to my ear than that quoted "Universal reproach," &c.

Nor is Milton alone among poets in his occasional use of the double trochee. Mr. Abbott (*Shak. Gram.* p. 329) quotes a few examples from Shakespeare, which might be largely increased; and instances might be given from modern poets, as Tennyson, in the *Coming of Arthur*,

Fitt the | light of | her eyes | into | his life |.

It seems therefore that there is no ground for the assertion that the iambic metre does not admit of the double trochee. At the worst it is allowable as an occasional discord to add richness to the general

* Since writing the above, I have been reminded that the line—

S. A. 175. Universally crowned with highest praises—cannot be read as a regular iambic line unless the second and fourth syllables of "universally" are accented. But I see no reason why we should try to read this as an iambic, more than other lines in the same chorus, e.g.—

175. This, | this is he, | soft | ly a while |

176. Let us not | break in | upon him |

177. And by | himself | given o | ver—

all of which seem to me to have an anapaestic rhythm. Or—

329. Forthwith | how thou ought'st | to receive | him |

1707. A sec | ular bird | a | ges of lives |

both of which (like 175) end a chorus, and the latter is preceded by a regular 5-foot iambic—

1706. And though | her bo | dy dies, | her fame | survives |.

More than this; if we examine the strophe to which 175 belongs, I think we can have little doubt that Milton meant it to be anapaestic, like the 172nd line to which it corresponds:—

For him | I rec | kon not | in high | estate |

Whom long | descent | of birth |

Or thē sphērē | of for | tūne rās | es :

Cf. 116, 329.
But thee | whose strength | while vir | tue was | her mate |

Might have | subdue | the earth |

3 iamb.
.ūniver | sally crōwned | with high | ēst prāi | ses.

harmony. Even taken by itself it is not necessarily unmusical, and it is certainly forcible and expressive. Leigh Hunt singles out for special admiration the rhythm of the following Alexandrine—

As the God of my life, Why hath he me abhorred?

To proceed to the consideration of the second law: no doubt the trochee sounds better if it follows a pause; but this cannot be called a law, in the sense that it is strictly observed by the best poets. Thus Milton has—

*P. L. vi. 912. Yet fell, remem ber and fear to transgress
P. L. v. 160. Before thy fel lows am bition to win
P. R. ii. 171. And made him bow to the gods of his wives
P. R. ii. 180. Cast wan ton eyes on the daughters of men
P. R. ii. 405. And with these words his tem ptation pursued
P. R. ii. 428. Not dif ficult if thou hearken to me.*

J. B. MAYOR.

LITERARY NOTES.

The Mazzinian organ, *La Roma del Popolo*, for Feb. 22, contains a desponding review of M. Renan's *La Réforme intellectuelle et morale*, by Signor Mazzini. He disapproves of the political inaction of the intellectual aristocracy of France, represented by Ledru-Rollin, Louis Blanc, Edgar Quinet, &c., who might and should have directed the Parisian insurrection to a better end.

G. L. Kriegk communicates to the *Allgemeine Zeitung* (Feb. 29) what he calls "An Autobiography of Gervinus," a sketch written in 1829, which gives an interesting though brief account of the historian's early intellectual history. His father was in middling circumstances, and insisted for some time upon the boy's choosing some mercantile career, so as to retard the beginning of his university life. He expresses himself as grateful to the works of Hessemer and Jean Paul for rousing his dormant energies to life, even though they filled him for a time with wild poetical aspirations, and led him alternately to wish to become an actor, and to fancy himself in love with a girl he had never seen. At last, as he was trying to write a conscientious journal of his mental uncertainties, it suddenly dawned upon him that he had mistaken his vocation, that his mind was naturally critical, and that science would give him the satisfaction which he sought in vain in aesthetics with Hessemer, in morals with Jean Paul, and six weeks later, he writes again to the same friend (Kriegk) that he is at last "three-cornered," and therefore happy and glad.

K. Goedeke writes to the same paper (March 3) to protest, at least on his own behalf, against the often repeated complaint that North Germans neglect and misunderstand Grillparzer, and he communicates two letters he had received from the poet, who spoke of himself in 1869 as "his own critic, and seeing everything grey upon grey," but grateful to Goedeke for expressing about his works just the thoughts which had directed and inspired their composition.

Chaucer tells us himself that his *Treatise on the Astrolabe* was chiefly translated from Latin treatises on the subject. It has been discovered, by Mr. Bradshaw and Mr. Skeat, that the treatise which he has made most use of (as it accounts for nearly two-thirds of his work) is the Latin version entitled *Compositio et Operatio Astrolabii*, translated from the original of Messahala, or Macha-allah, an Arabian astronomer of the eighth century. MS. copies of this Latin text are probably numerous, as there are no less than five in Cambridge.

Art and Archaeology.

A PHYSICAL EXPLANATION OF TURNER'S LATER STYLE.

A VERY remarkable lecture was delivered to a crowded audience at the Royal Institution, on Friday last, by Mr. Liebreich, ophthalmic surgeon and lecturer at St. Thomas's Hospital, "on the effects of certain faults of vision on painting, with special reference to Turner and Mulready." He explained the changes in Turner's later pictures as arising out of an alteration of

Turner's sight, produced by dimness in the crystalline lens. This dimness developed itself during the last twenty years of Turner's life, and caused, in the first instance, a diffusion of light, which gives to his pictures painted after 1831 a peculiar blueish haze in the lighted parts of the canvas, contrasting too strongly with the surrounding portions in shadow. After the year 1833, a limited opacity develops itself in the crystalline lens, the effect of which is to give a vertical direction to that diffusion of light. The consequence of this further and more serious modification is a vertical streakiness in the pictures. Every illuminated point in nature was transformed on the picture into a vertical line, which is the longer in proportion to the intensity of the light of the point in nature. Thus, e.g. there proceeds from the sun in the centre of a picture a vertical yellow streak, dividing it into two entirely distinct halves, which are not connected by any horizontal line. But even less illuminated objects, like houses or figures, form considerably elongated streaks of light. In this manner, therefore, houses that stand near the water or people in a boat, blend so entirely with their own reflections in the water that the horizontal line of demarcation between house and water, or boat and water, entirely disappears, and all becomes a conglomeration of vertical lines. The lecturer maintained that everything abnormal in the shape of objects in the drawing, and even in the colouring of the pictures of that period, may be explained by this vertical diffusion of light. It was only during the last years of Turner's life that the dimness of his crystalline lens had increased to such an extent that it prevented him from seeing even his own pictures correctly. This alone is sufficient to account for the strangeness of their appearance, quite apart from any consideration of the state of his mind. In proof of this view, a very remarkable experiment was here introduced by the lecturer. A small copy on glass had been prepared of Turner's picture of Venice (1833), painted from sketches taken in Venice in 1829, before the painter's eyesight had begun to alter. This copy was then placed in a magic-lantern, and thrown upon a screen. By the addition then to the lantern of an optical contrivance simulating the subsequent defect in Turner's eye, the whole picture was transformed into the Venice which Turner saw on his second visit in 1839; the resemblance to his pictures painted after this date was certainly very striking. By the same contrivance an ordinary tree was transformed into a Turner-esque tree, &c.

The lecturer then explained the influence of other more frequently occurring anomalies of sight on painting, especially of myopia, hypermetropia, and astigmatism, as well as that of colour-blindness, and proceeded in the second place to discuss a change perceptible in Mulready's later paintings. In the latter part of his life Mulready's crystalline lens became yellow, and therefore absorbed a certain small quantity of blue light. To understand the effect of this yellow discolouration, the best means is to look for a long time through a yellow glass. In the first moment we see all yellow; but soon the retina is dulled by the yellow light, and therefore the aspect of nature becomes again correct; not so the aspect of a picture: in a picture the intensity of light is so infinitely smaller that the quantity of blue light, completely absorbed by the yellow glass, cannot fail to be remarked even in such places of the picture as are painted with the intensest blue; while smaller quantities of blue pigment are not seen at all because they have been completely absorbed by the yellow glass. In this way we comprehend how it was possible that Mulready, in his later years, saw nature quite correctly, but his picture too yellow, and that he therefore painted it too blue, not, as is generally believed, too purple. If we look through the yellow glass at his later pictures, we see that all their faults disappear; the blue shadow of the flesh becomes grey, the purple face becomes naturally red, the glaring blue of draperies is softened. That we really, by means of this yellow glass, see his later pictures as Mulready saw them himself, is proved by applying it to the latter of two pictures, both in South Kensington Museum, representing the same subject ("Brother and Sister," or "Pinching the Ear"), the one painted in 1836, the other twenty-one years later.

After having explained that Turner, in consequence of what was really the beginning of cataract, saw nature changed, his picture, however, correct; that Mulready, through his yellowish lens, saw nature correct, but the colour of his picture changed; that another painter alluded to in the course of the lecture, in conse-

quence of his astigmatic eye, saw distant objects elongated in a vertical direction, while the painting on his canvas, on the contrary, was enlarged in a horizontal direction ;—Mr. Liebreich explained the means by which such defects might be corrected, and concluded by saying that artists and art-critics ought to make the results of scientific investigations their own. In this way art-critics will often obtain explanations of certain changes in the style of painters, and artists avoid the inward struggles and disappointments which often arise through the difference of their own perceptions and that of the majority of the public.

The lecture will appear *in extenso* in the April number of *Macmillan's Magazine*.

CORNEILLE-PIERRE BOCK.

A MEMOIR of Corneille-Pierre Bock, by M. Alfred de Reumont, has just been reprinted from the *Annuaire de l'Académie royale de Belgique*, of which society Dr. Bock was an associate. Dr. Bock was born at Aix-la-Chapelle in 1804. After having prosecuted his academical studies at Bonn, at Heidelberg, and at Freiburg im Breisgau, he spent some time in Italy following up researches in classical and Christian archaeology. His first public post was that of professor extraordinary in the university of Marburg, to which he was named in 1821. But in 1834 the university was so disturbed by the serious antagonism between the elector and his subjects that Dr. Bock, then professor ordinary, felt his position no longer tenable, and resigned his chair. He next settled in Brussels, which he quitted after the death of his wife for Stuttgart, and finally fixed himself at Freiburg in the Breisgau. He was then named honorary professor in the philosophical faculty, and the lectures which he delivered in this capacity were always fully attended. They dealt chiefly with the history of art, but embraced that of literature and politics. The subjects of some of his most important courses were the history of the last days of the Eastern empire; that of the Iconoclastic emperors; and the origin of Christian art in its relation to classic work. It is to be regretted that, though he devoted all his life to special study, Dr. Bock has not published nor finished a single work of any length, so that his reputation even with the learned public is by no means that to which his considerable acquirements should have entitled him. In respect to the topography and archaeology of early Christian Rome, Constantinople, and Alexandria, he had amassed, in long years of labour, a fund of erudition which is now, it is feared, lost to the world. Though he has left numerous MSS. they are in a most unsatisfactory state, overloaded with corrections, and written in a hand which it is extremely difficult to decipher. His contributions to periodical literature and to the publications of societies were throughout his life incessant. All dealt with points connected with the history and archaeology of art. M. de Reumont closes his memoir with a brief account of some of the most important. They appeared for the most part in the *Bulletins de l'Académie royale de Belgique*, the *Jahrbücher des Vereins von Alterthumsfreunden im Rheinlande*, the *Christliche Kunstdächer*, and the *Niederrheinisches Jahrbuch für Geschichte und Kunst*. Dr. Bock was but sixty-six years old when he died on the 18th October, 1870.

ART NOTES.

C. J. Cavalucci gives a curious account (in the *Gazzetta ufficiale*) of the discussions which have been held respecting the site of Michelangelo's "David." In January 1503 (O. S.), when the statue was just completed, a council of artists and citizens met to discuss the question; Giuliano da Sangallo opined that the marble would perish by exposure to the weather, and that the "David" should therefore be placed in the middle arch of the Loggia dei Signori; Leonardo da Vinci, Piero di Cosimo, and others voted on the same side; Salvistro, a jeweller, and Filippino Lippi thought that the artist should be consulted and his opinion followed; Botticelli thought either in the Loggia or by the side of S. Maria del Fiore would be best; we are not told how Ghirlandajo, Perugino, and Lorenzo di Credi voted. The fears of Giuliano da Sangallo have now, after more than three centuries, been proved to be well founded, and experts express great anxiety as to the safety of the statue if it is left longer exposed to the action of frost and rain, an almost

imperceptible crack in the left leg of the figure being especially dangerous. The statue is now enclosed by substantial scaffolding, and its removal is settled upon, though its future place is uncertain; probably the Accademia delle belle Arti will be enriched with it.

The Lille Museum has again enriched itself by the acquisition of two considerable paintings. One is a remarkable specimen of the work of Simon van der Does; the other, a very valuable example of Pierre Verelst, a native of Antwerp, who was dean of the painters' guild at the Hague in 1660, and was one of the most distinguished disciples of Adrian van Ostade.

The illustrated catalogues for the sales of MM. Michel de Treitaine, Pereire, and Paturle, may be obtained on application to M. François Petit, 7, Rue Saint-Georges, Paris.

At the sale of Étienne Arago, the Louvre Museum acquired the "Environs of Vincennes," by Étienne Moreau, for 2050 fr.; and the "Terrace at Versailles," a very beautiful example of Bonnington, for 3050 fr.

On the occasion of the excavations made lately at Pompeii, by the direction of Signor Fiorelli, in the presence of the Grand-duchess Olga, a table in Greek marble was discovered, decorated by painted figures, which are supposed to represent a scene from the Niobe. There were also found several bronze vases, and a rudder of bronze, supposed to have belonged to a statue of Fortune.

A worthy monument to the memory and honour of Ingres has just been erected in the great hall on the ground floor of the École des Beaux-Arts at Paris. A stele in white marble, designed by Duban, has received the bronze bust executed by M. Guillaume. On the base of the stele two medallions are sculptured, those of Ingres' two pupils, Hippolyte Flandrin and Simart.

A third and revised edition of the catalogue of the picture gallery at Oldenburg has just appeared. In the preface, the director, Herr von Alten, gives full particulars as to the general formation of the collection by successive grand-dukes. But the important feature of the work is the reproduction in an appendix of the different monograms and signatures which occur on the various paintings. It is hardly possible to over-estimate the value to students of catalogues executed in this thorough way, catalogues which really give us reliable materials.

The *Kieler Zeitung* for December 1871 contains an article by Professor Klaus Groth, which is nominally a review of Dr. Hermann Grimm's recent publication *Zehn ausgewählte Essays etc.*, but actually a very interesting commentary upon the notice of Asmus Jacob Carstens, which formed one of these ten essays. The account which it contains of the bygone interest and taste in art of the Schleswig-Holsteiners, an interest and taste which found perhaps its highest expression in the marvellous wood-carvings of Bruggemann, will be information to most, and has especial value as aid to us in tracing the line of Carstens' artistic descent.

A terracotta vase has been recently brought to light from the bottom of the Seine. It contained several small coins of Philippe le Bel, and a fine medal in gold which represents Philippe le Bel holding a sceptre in his right hand, and a *fleur-de-lis* in his left. The reverse is a cross which divides the inscription, and is surrounded by four *fleurs-de-lis*.

M. Beulé opened his course of archaeology at the Bibliothèque Nationale on the 20th of February. The subject was "Une maison pompéenne."

M. René Ménard concludes his excellent notice of the Pereire collection in the *Chronique des Arts* for February 18th.

J. E. Millais, R.A., has recently executed a portrait of Sir James Paget, which is one of the most masterly pieces of

painting which have ever come from the hand even of this most masterly painter. Sir James is represented at half-length ; he is lecturing ; on the slate behind him he has just chalked the fracture which is his text. Mr. Millais attended the class on one occasion to see Sir James in the act, and whatever Mr. Millais has seen he has a supreme power of painting. A full-length portrait of the Marquis of Westminster is also, in spite of pink, and in spite of the figure looking somewhat unsubstantial, a highly satisfactory achievement. It seems exacting, rather than just, to demand yet more of one who gives us so much. But, in face of this magnificent sleight of hand, rises up the recollection of the exquisite workmanship of some of Mr. Millais' earlier work, the lingering traces of which seem now to be fast disappearing, and we ask that Mr. Millais should give us yet again, as perhaps he alone can, the touch of colour carrying on its edge that drawing without which the freest handling degenerates into mere smudges of the brush.

Mr. Huth has just purchased two paintings by Mr. Watts, R.A. : the "Daphne," which was exhibited at the Royal Academy in 1870 ; and "The Three Graces," a picture which is a very charming and refined example of this artist's treatment of female form.

We have received with much regret the announcement of the recent death of M. Riocreux, the custodian of the Musée de la Manufacture de Sèvres. M. Riocreux had attained the ripe age of eighty-four. His name is well-known in this country as the author, in conjunction with M. Brongniart, of the valuable *Description méthodique du Musée céramique de la Manufacture de Sèvres*.

The engravings which were stolen from the library of the Louvre, a few days before the final struggle of the Commune, have turned up in a shop in the Rue Lafitte. The police got scent of the person by whom they were sold, and have seized a professional thief, who at once made full confession.

The projected restorations of St. Mark's at Venice are exciting dread and anger throughout the whole world of archaeology and art. The municipal council having destroyed—*i.e.* restored—Torcello, and inflicted much irreparable damage on other precious monuments, intends finally to set to work on St. Mark's. Salviati is to cook up the mosaics, the gilding is to be entirely renewed, the floor to be levelled up, &c. But can nothing be done to avert this catastrophe ? Ignorance, not intentional vandalism, is directing the efforts of the council, and if appeal were made from proper quarters, they might perhaps stay their hands, and eventually this restoring fever might pass over. We have seen it ravage England and France, and, in watching its course, we have felt that what was lost was as nothing provided only Italy might escape. And now, whilst we sit still, zealous renovators approach St. Mark's. Such matters as these are commonly most at heart with those who can bring least time or power to serve them. But surely some one, lacking neither power nor will, might be found—say, for instance, Lord Stanhope—who might initiate here an effective protest against the wholesale degradation of one of the chief monuments of Europe.

Professor Dr. Anton Springer has accepted the Professorship of "Kunst- und Kulturgeschichte" in the new University of Strasburg.

In a letter to the *Beiblatt zur Zeitschrift für bildende Kunst* for February 23, Dr. Max Allihn demonstrates the untenability of the theory recently put forth by Herr Bergau as to the interpretation of the Dürer composition commonly known as the "Vier Hexen." Herr Bergau maintains that the bullet on the table is the apple of Discord ; that the "O. G. H." which has been taken to stand at one time for "o geliebte Hexe," at another for "o Gott hilf," means really "Olympischer Götterhader" ! that three of the witches are Juno, Minerva, and Venus, and that the fourth must be Paris, because she is remarkably small-hipped and small-breasted. As to this last peculiarity, Dr. Allihn very correctly remarks that small breasts and narrow hips were points in the most esteemed type of female

beauty in the sixteenth century, and he might have added that in all the best periods of art artists have invariably approached as nearly as possible to the male type whilst accentuating the distinctive peculiarities of female form.

An exhibition of the works of Henri Regnault is in course of preparation at the Ecole des Beaux-Arts.

A pupil of Hippolyte Flandrin, M. Perrodin, has just completed, in the church of Notre Dame de Paris, an important series of paintings. In the chapel of the Virgin behind the choir he has executed six compositions, the subjects of which are taken from the life of the patroness of the church. In the south transept, above the altar, M. Perrodin has depicted the Annunciation and the Assumption ; in the arcades are twelve sacred personages, connected either with her life or worship. The martyrdom of St. Stephen is painted in the north transept, and in the arcades twelve saints, who were of the clergy of Paris. The artist has also decorated the inside of the doors of the "armoire aux châsses" with eight subjects from the history of St. Louis.

The Académie des Beaux-Arts has decided, in accordance with other sections of the Institut, that each of its members shall contribute a month's salary towards the work of the liberation of the French territory. The French artists have been for some time past actively engaged in organizing committees amongst themselves to receive contributions in money, or in works of art. The Comité Directeur published its circular in the *Moniteur universel* of February 25, and fresh names and fresh particulars are given every week in the *Chronique des Arts*.

The principal event of the Paturle sale was the contest between the agents of the museums of New York and Neufchâtel for the "Pêcheurs de l'Adriatique." This picture was the last painted by the unfortunate Leopold Robert, a native of Neufchâtel. It was executed in Venice, and was despatched to France early in 1835, but arrived too late for the "Salon," and shortly after this, on the 20th March, he committed suicide. An exhibition of his works was organized during the same year at Neufchâtel by his brother, Aurel Robert. His nephew, M. de Meuron, was the agent sent by his native town to secure for their museum the last work of their distinguished fellow-citizen. The biddings ran high, but it is supposed that, on learning the state of the case, the New York agent ceded the point, and the picture became the property of the canton for the sum of 83,000 fr. A fine example of Troyon, "Animaux fuyant l'orage," went for 63,000 fr. The well-known "Aves au repos," by Decamps, was knocked down to M. Yriarte, after a spirited contest with the New York agent, for 51,500 fr. Scheffer's "Marguerite à l'église" fetched 40,000 fr. There seems, however, to have been a general sense of disappointment when the numerous paintings preserved in this collection, and held to have been the masterpieces of this artist, faced the blaze of common day. The mode is past.

Dr. Franz Bock, of Aachen, has just brought out, in conjunction with Mr. Willenssen, an archaeological historical description of *Die mittelalterlichen Kunst- und Reliquienschätze zu Maestricht aufbewahrt in den ehemaligen Stiftskirchen des heil. Servatius*. The book is amply illustrated with woodcuts.

We learn from the report for 1871 of the committee of the Germanischen National-Museum at Nürnberg, that they received during the past year, amongst other gifts, the important portrait by Albrecht Dürer, of Hieronymus Holzschuber, which has been presented by the Holzschuber family, in whose hands it has remained up to the present day.

The Hodshon picture gallery at Amsterdam comes to the hammer about the middle of April. It consists of twenty-five fine examples of the Dutch and Flemish schools in the sixteenth and seventeenth centuries, amongst which occur the names of Jan Steen, Van Dyck, Dow, Hobbema, Polter, and Ruisdael. The catalogue is on the point of appearing.

The *Gazette des Beaux-Arts* for the present month contains an article entitled "A propos d'un portrait politique," which narrates, from authentic documents, "extraits des archives du Saint-Office, qui sont à la Bibliothèque," a curious episode from the combat in which the court of Rome engaged to prevent the success of the candidature of Henry IV. These documents relate the prosecutions instituted against certain persons who had engraved in Rome a portrait of the "pretended king of Navarre." The facts in themselves are not unworthy notice, but they derive especial interest from the fact that the chief offender was Philippe Thomassin, the most celebrated of the "graveurs troyens." The most zealous researches have hitherto failed to bring to light the date of his birth, which is now settled beyond dispute, for in his deposition, taken June 12, 1590, he says, he is the son of Jean Thomassin, native of Troyes in Champagne, and aged twenty-nine years.—The "Vue générale de l'art chinois" is concluded.—The publication of documents relating to the arts during the Commune is continued.—M. Henri Lavoix contributes an entertaining chapter on the "Portraits of Molière."—M. René Ménard begins a notice of the Institution of South Kensington, and M. Champfleury reviews the Bibliophile Society's edition of the *Éloge de la Folie*, which has just appeared, accompanied by a careful and spirited reproduction of Holbein's original designs.

The magnificent bust of Voltaire by Houdon, which was sold at the Broderip sale for 665 guineas, became the property of Mr. Alfred Morrison.

On comparing the recent translation of Dr. A. Woltmann's *Holbein and his Time* with the original, it will be found that the work has been in parts quite remodelled by the author, and that in some respects he has materially improved upon the form of the German book. Unfortunately the results of the last two years' discoveries, which have materially added to our knowledge of the Holbein family, have not been incorporated into the translation, and the suppression of the catalogue of works makes the English volume quite useless to students.

The scope and intention of Mr. Eastlake's *History of the Gothic Revival* is announced on the title-page, where he defines it as "an attempt to show how the Gothic style which lingered in England during the two last centuries has since been encouraged and developed." With this object in view, his work opens with a description of some of the more notable phases of the survival of Gothic design—firstly, in the common and vernacular specimens of architecture which, though later in date than the introduction of the renaissance spirit into England, exhibit unmistakable characteristics of an unbroken Gothic tradition; and secondly in the Gothic works of Sir Christopher Wren. The conspicuous announcement above quoted would naturally lead us to expect a more thorough and exhaustive treatment of the intermediate styles; and few subjects could be more interesting than a discussion by a thoroughly competent writer, educated by an intimate acquaintance with buildings rather than with documents, of the gradual encroachment of the later on the earlier style, and its own adaptations and developments, which terminated on the one hand in a predominance which was never absolute (the conquered style from time to time re-asserting itself by a recognisable reversion), and on the other, in the formation of a style which was to the greatest possible extent national and vernacular. Some portion of the discussion which we have suggested might perhaps reasonably be considered beyond the present writer's scope, but, from any point of view, this portion of his work is very inadequate. The history of the development of antiquarianism (which should have been more clearly defined as a mere development of a special phase of a study which existed previously) brings the writer to the well-known epoch of Horace Walpole, whose literary and artistic mediaevalism, together with the products of the fashion which he set, is discussed at greater length than the importance or interest of the topic appears to deserve, seeing that no attempt is made to give any intellectual significance to this strange development. A similar defect is evident in the treatment of the later revival in the time, and in connection with the influence of Sir Walter Scott. At this period, at least, the revival of Gothic architecture was distinctly the result of intellectual

changes of the widest extent and of the deepest possible import. From this to our own period, the history of Gothic architecture is one of unbroken and almost unchecked development, and in this more modern portion of his subject, Mr. Eastlake appears to be more at home—so much so that for mere facts he leaves little to be desired. For criticism it is otherwise. The criticism of contemporaries involves considerable embarrassment; and the means which Mr. Eastlake has adopted of solving the difficulty—that, namely, of modifying a lengthened panegyric of pretty even complexion by an occasional common-place exception—though no doubt safe, is scarcely profitable. His collocation of descriptions and illustrations will, however, give those who possess the necessary interest and capacity the means of forming theories of their own as to the tendencies of our own architectural period. While feeling grateful for this attempt to fill a gap in our art literature, we do not consider the present work to have attained a sufficiently high standard, either literary or critical, to merit more prolonged discussion. It is, in fact, little more than a compilation from somewhat obvious literary sources; whereas a really valuable work on this and cognate subjects should, in the first place, be founded on an acquaintance with stone rather than paper, and, in the second place, should embrace a thorough acquaintance with the intellectual changes implied in changes of external fashion.

New Publications.

- COLERIDGE, H. J. (S. J.) Life and Letters of St. Francis Xavier. Vol. I. (Quarterly Series.) Burns and Oates.
- LAMARTINE, Alphonse de. Twenty-five Years of my Life. Translated by Lady Herbert. Bentley.
- MEISSNER, J. Untersuchungen über Shakespeare's Sturm. Dessau: Reissner.
- MEZIERES, A. W. Goethe, les œuvres expliquées par la vie, 1749-1795. Paris: Didier.
- MILTON, John, Autobiography of. Ed. by Rev. James J. G. Graham. Longmans.
- MORRIS, R., and SKEAT, W. Specimens of Early English. Vol. II. A.D. 1298-1393. Clarendon Press.
- NÁGÁNANDA; or, The Joy of the Snake-World. A Buddhist Drama. Translated with explanatory notes by Palmer Boyd, with introduction by Prof. Cowell. Trübner.
- RALSTON, W. R. S. The Songs of the Russian People. Ellis and Green.
- ROGERS, J. E. T. Bacchae of Euripides translated into verse. Parker.

Physical Science.

Stricker's Handbook of Histology. [Handbuch der Lehre von den Geweben des Menschen und der Thiere, unter Mitwirkung herausgegeben von S. Stricker. 1870-1.] Leipzig: Engelmann.

DURING the thirty and odd years which have passed since Schwann published his famous essay, the science of Histology has progressed with most remarkable rapidity. Perhaps it would be more accurate to say that our knowledge of histological facts, our acquaintance with the details of the microscopical and so-called ultimate structure of living beings has become immensely extended. The admirable recent improvements in the microscope, the skilful or fortunate use of staining and hardening reagents, the possibility of carrying on microscopical observations at all manners of times and in all kinds of places, the exquisite pleasure, the charm of a satisfied curiosity which comes from the study of the delicate and fantastic patterns of animal and vegetable tissues—these and other causes have led to the accumulation of memoir upon memoir and of fact upon fact. But while the knowledge of particulars has come, wisdom has lingered; the insight into general laws has moved but slowly, or even stood still, if not actually gone back. Of the rank and file of histologists we might almost say that the breadth of their views has been in direct ratio to the focal length of

their lenses, year by year diminishing in arithmetical progression. There have been many, perhaps too many, animated controversies, but these have been for the most part factitious and unreal, while the efforts after a larger grasp have been few and far between. When, therefore, it was announced some two years or more ago that "all the talents" of Germany were about to join under Stricker's leadership to write a new *Handbook of Histology*, the hope sprang up that a work might result which should mark the beginning of a new era in histology, and breathe a spirit of unity into a body of disconnected facts.

We cannot say that this hope has been fulfilled. With all respect to the many praiseworthy labours of the Viennese histologist, the production of himself and his fellow-workers, the last part of which has just reached us, shows that he does not possess the peculiar qualifications for so important a task as that of editing such a volume. It was within his choice either to select such writers as would, without further oversight on his part, do their respective works in such a way as to construct a congruent whole, or by constant editorial action to have fitted together the unequal segments. Neither of these has he done; indeed in an exceedingly *naïve* preface he simply flings over all such graver duties.

The various writers seem to have had no definite standard whatever set before them. Some of the contributions are just what all the articles in such a work ought to have been: exhaustive but concise and critical expositions of the present state of our knowledge concerning the subjects in hand, the author's individual views being not concealed but subordinated to the views generally held, or at least not made predominant. Such are the articles of Max Schultze on the Retina and on the Structural Elements of the Nervous System. These are very clearly written, are not too long, embody all the important points of the author's own researches, and yet distinguish very successfully between the actual known and the hypothetical or probable, and may be studied with profit both by the young student who knows little or nothing of the subject, and by the working histologist who is already acquainted with Max Schultze's original memoirs. Very similar in general scope and work is Waldeyer's article on the Auditory Nerve and Cochlea, thus contrasting favourably with the preceding one by Rüdinger on the Membranous Labyrinth, which is singularly lacking in expository power. Somewhat differing from these longer articles, in as much as they deal with quite special points, but still characterized by the same good qualities, are the articles by Brücke on Muscle in Polarized Light, and by Kühne on Nerve and Muscle Fibre. The title of the latter should however rather have been "On the Ending of Nerves in Muscles;" and we see here in a very marked manner the editorial deficiencies. Kühne's paper deals only with the terminations of the nerves in muscles, and deals with the subject, as on such a matter of detail might be expected, from his own point of view; Brücke's article treats of the appearances presented by muscle under polarized light. Both papers would have been extremely valuable as adjuncts to a general exposition of the structure of striated muscle; but this, perhaps the most important subject in the whole range of Histology is, marvellous to say, absent.

More than half the fourth part is taken up with an article by Meynest on the Mammalian Brain. This is in great measure a monograph embodying the author's own views on the subject, and as one of a series of similar monographs would have been a valuable memoir in its right place. But to speak of it as an expository treatise would be a jest. Writing in exceedingly bad German, and in as twisted and matted a style as it was ever our misfortune

to meet with, the author complicates the difficulty of an already sufficiently complex subject with further and needless perplexities of his own making.

Several, we might say very many, of the articles have a fault of quite a different kind; the writer's individuality, instead of being in excess, is not sufficiently prominent—the result being a certain flabbiness and want of tone. Such for instance is the contribution of Rollett on the Blood. Perhaps no one subject in the whole work afforded larger scope for decisive handling; but Rollett's article is loaded with detail without being exhaustive, enters into a variety of theories without the safeguard of a searching criticism, is an industrious compilation of real or supposed facts without perspective, and what appreciation of size it shows, is in the direction of magnifying unduly the most recent novelties from the newest physiological laboratory.

A similar want of judgment concerning the relative importance of various topics must, too, we fear, be laid to the charge of the editor himself.

The article on the Cornea is of inordinate length, apparently for the reason that of late years corneal research has been the fashion among young histologists, so that histological journals are seldom continued for many numbers without a paper on the cornea. On the other hand the articles by Hering and Ludvig on the Liver and Kidneys respectively, which together occupy fewer pages than does the cornea alone, to a certain extent suffer because the writers have evidently been anxious to confine themselves within fixed limits. The article by Pflüger on the Salivary Glands is longer than either Hering's or Ludvig's; and while every one is very glad that Pflüger should have such an opportunity of expounding his own particular views, the length of space given to him is out of proportion to the relative importance of his topic, compared with that of the two articles just mentioned. Had it been worth while to undertake the labour of such a book with the knowledge that it could only last a few years, the plan of giving up space to what may be called in a certain sense topics of the day would have been intelligible enough. But the editor surely had the ambition that this book should last for many years at least; and in such a case to stint matters of lasting value for the sake of enlarging on questions whose interest is emphatically of to-day, and may prove quite transitory, shows want of judgment.

But it may be we wrong the editor in laying this charge at his door; his plan has been, perhaps, to have no plan at all, and hence each contributor has taken just such space as he pleased. The older tried writers have accordingly drawn away towards the golden line of silence, while the younger writers have written without restraint.

In some however of the articles contributed—or rather in reference to some of the topics treated of by the younger coadjutors—one would have gladly seen a greater amount of matter. We cannot but regard it as error to have left such an important matter, for instance, as that of the placenta to be written up, "unter Stricker's Leitung," by an investigator whose chief qualification seems to be that the organ in question has been selected by him as the field of his *Erstlingsarbeit*. The subject in consequence, by no means of least importance, has been very imperfectly treated, as will be recognised at once when it is stated that all the writer knew or thought worthy of mention about the placenta is comprised without compression in three pages of a work in which the cornea occupies more than fifty.

The articles which we have selected for special mention may be regarded as typical of so many classes in which all the contributions may be arranged according to their value and character; and it will be evident from what we have

said that the publication of this *Handbook of Histology* does in a certain sense mark an opportunity lost. The work is not, what we hoped it might have been, a general exposition exhaustive in character, and yet manifesting a bold grasp and clear critical insight; it is not a series of original monographs, a few of which might become classical and thus the whole remain valuable; it is not a text-book to put into the hands of a learner, being in this respect less useful than Kölliker's work and far below Sharpey's treatise; but it is a collection of essays very diverse in value and dissimilar in bent, and, except that it does nominally embrace the whole range of Histology, might almost have been published under the title of an *Archiv* without the editor's intention being recognised.

Regarded indeed as an *Archiv* it does fulfil very important functions, justifying perhaps the labour bestowed on the English translation which Mr. Power has undertaken for the New Sydenham Society. It gives a very vivid picture of the immense histological activity going on in Germany at the present moment; it brings before the reader all the latest information, shows him all the lines of enquiry which are being worked, makes him thoroughly acquainted with all the various controversies now raging, and if English work has perhaps been a little neglected by the various writers (if for instance the name of our most active successful microscopist, Dr. Beale, occupies greater space in the foot-notes than the facts which he has observed in the text), it is perhaps scarcely the part of an English reviewer to complain.

Of the intrinsic value of the various controversies which go so far to swell the volume, in what way they will probably end, which in each debated part is grain and which is chaff, it does not become a single critic to speak in a judicial spirit. It is his duty to report that the whole field is vexed with many eddies and crossing currents, and that it should have been the duty of the editor to show that there was also a general stream in a given direction, and to have made it clear what that direction was.

MICHAEL FOSTER.

Scientific Notes.

Geography.

The Region of Mount Vitos in Central Turkey.—Dr. F. von Hochstetter, the geologist of the north island of New Zealand, publishes in *Petermann's Mittheilungen* the results of his geographical and geological researches made during 1869, in the district surrounding Mount Vitos. Though classic ground, and the source country of rivers described by Thucydides and Strabo, the region has remained up to the present time a blank in the exact topography of Europe. Dr. Hochstetter accompanied a large party of engineers and surveyors, whose object was the selection of a route for the central line of the future railway network of Turkey, and used this opportunity of collecting valuable material for the construction of the large scale map (of an area of about 4500 square miles of country) published with his memoir. A notable feature of the map is the great number of elevations above sea-level, determined by levelling and barometer, which are marked on it. The Vitos, a huge mass of syenite, rising to a height of 7600 feet, stands midway between the Rilo Dagh and the Balkan, and may be considered the central point of Turkey, being the source mountain of four of its chief rivers. It bears the same relation to Sofia, the capital of southern Bulgaria, as Vesuvius does to Naples, or Table Mountain to Cape Town, and is weather prophet for the whole region; when the mists collect into clouds round its summit-plateau in summer, refreshing showers water the plain of Sofia; when a white snow-cap appears in winter, heavy storms are expected in the lowland. The magnificent view commanded by the summit, and the ease with which the mountain is ascended, will doubtless make Mount Vitos the Rigi of Turkey as soon as the district is opened up by railways. The famed iron-country round Samakov, south of the Vitos, will also become accessible, and this has been considered a point of great national importance by the Turkish government: from the peculiar character of the distribution of the mineral, however, Dr. Hochstetter does not anticipate any great future development of this industry. The iron ore occurs as grains of magnetite in

the syenite which extends over a vast area, and is collected at weirs intercepting the mountain torrents which wash it from its matrix.

Arctic Regions.—Dr. Petermann has collected and published in the *Mittheilungen* the results of those expeditions of last year which took the direction of Spitzbergen, extracted from journals kept in no less than thirteen vessels, and gives in a memoir the history of the discovery of Gillis and King Carl Lands to the north-east of Spitzbergen; each subject is illustrated with most admirable charts. The map of the sea-bed round Spitzbergen is specially interesting, showing clearly the limits and the steep outward slopes of the great submarine plateau on which the archipelago rests. A great point in the work of last year was the discovery and survey, by Mr. Leigh Smyth and his Norwegian sailing-master, Captain Ulve, of a hitherto unsuspected extension of the north-east land of Spitzbergen, proving it to stretch three degrees farther eastward than the supposed coast, and nearly doubling the extent of land hitherto shown upon the map. The additions made to our knowledge of the temperatures of the sea in these regions, both at its surface and at various depths, are likewise of great importance. Generally, Mr. Leigh Smyth found the water colder below than on the surface; but there were some exceptions, these being the most remarkable:—

	<i>July 1st, Lat. 70° 40' N. Long. 20° E.</i>	
	Maximum.	Minimum.
	°F.	°
Surface	38	38
100 fathoms	38	35
Bottom 200 fathoms	44	35

	<i>September 11th, Lat. 81° 15' N. Long. 18° E.</i>	
	Maximum.	Minimum.
	°F.	°
Surface	33	33
No bottom 300 fathoms	42	33

South Africa.—Herr Carl Mauch, the explorer of the South African gold-fields, has sent to Gotha a most valuable geological map of the Transvaal Republic, based upon his own journeys and astronomically determined positions. The traveller, at the date of his communication in July 1871, was on the point of undertaking a new journey to Manica between the Limpopo and Zambezi rivers. South African newspapers announce the discovery of diamonds in various parts of the north and north-west of the Transvaal Republic. This greatly extends the known field of their distribution, and gives a prospect of a much wider region of active search.

Zoology.

Hippocampus and Calamostomus.—All the species of recent Hippocampi lack a caudal fin; their slow movements are entirely effected by the rapidly undulating dorsal fin, the tail having merely a prehensile function. In this respect they differ from the otherwise extremely similar fossil Calamostomus from Monte Bolca. Professor Canestrini, of the University of Padua (who has recently been elected one of the foreign members of the Zoological Society of London), has made the interesting discovery that very young Hippocampi are provided with a rudimentary caudal fin, and he regards this as direct evidence of a genealogical connection between these two genera. A similar relation exists between the recent genera *Nerophis* and *Syngnathus*, the latter being provided with, while the former is without, a caudal fin. (*Atti Istitut. venet. di Scienze*, vol. xvi.)

Development of Sturgeons.—Not less interesting than the discovery of a caudal fin in the young of Hippocampus is that of the presence of teeth in recently hatched sturgeons. This discovery was made by two observers, Pelzam and Knoch, nearly at the same time, and independently of each other. The latter describes and figures them in *Bull. Soc. Nat. Mosc.* 1871; in the sterlet (*Acipenser sterletus*) there are ten teeth in the upper jaw and eight in the lower. These teeth are not without function, the young sterlets being carnivorous, and, in fact, so voracious that they attack each other. The exact period when these teeth are lost has not yet been ascertained.

The Hairy Tapir (*Tapirus Roulini*).—has hitherto been one of the greatest desiderata for zoological collections; beyond two skulls presented by Roulin, the discoverer and first describer of this animal, to the Paris Museum in 1829, no other example has ever been brought to Europe. This is to be accounted for less by its scarcity than by the difficulty of transporting skins of so bulky an animal on the back of Indians from the highlands of Ecuador and New Granada, to which region it is confined, to the coast. Thanks to the exertions of Mr. Buckley, the British Museum has recently acquired a very fine series of six perfect examples, three adult, two half-grown, and one young, the skeletons and skulls having been preserved beside the skins. This tapir differs from the lowland species in being covered with dense and long black hair, which adapts it to the requirements of the colder elevated region that it inhabits. The young, as in all the other American tapirs, is spotted or banded with white or yellow, thus calling to mind the affinity of these animals to the pig.

The Fauna of the Mammoth Cave.—In the *American Naturalist* for December 1871 and January 1872, the editors have collected a vast amount of interesting matter regarding the Mammoth Cave and its inhabitants. The remarkable blind fishes are described by F. W. Putnam; the paper being provided with some excellent steel-plates illustrating the anatomy of *Amblyopsis spelaeus*, as well as that of *Chologaster cornutus*, *Typhlichthys subterraneus*, and *Chologaster Agassizii*. Diptera are represented by two species, one of *Anthomyia*, the second belonging to the genus *Phora*. Among the beetles are *Anopthalmus Tellkampfii*, which is totally blind, and *Adelops hirtus*, on which are seen two pale spots that may be rudimentary eyes. Next there are two wingless grasshoppers, *Hadenoecus cavernarum* and *Raphidophora stygia*, with perfectly formed eyes. A species of Campodea (*C. Cookei*) is remarkable for occurring in the vicinity of the cave: it is without eyes. Of the Myriopods, *Spirostrephon Copei* was met with three or four miles from the mouth of the cave; it is the only truly hairy species known, and is blind; the other species of this group found living in caves have eyes. Next to the blind fish, the blind crawfish (*Cambarus pellucidus*) has attracted most attention. The eyes are atrophied; the cornea exists, but is small, circular, and not faceted. The eyes are more perfect in the young than the adult, indicating ancestors unlike the species now existing. There is further an isopod crustacean (*Caciodotea stygia*) found, in company with the Campodea, on the sandy bottom of a shallow pool four or five miles from the mouth of the cave. It is nearly allied to *Idotea*, but differs from it in being blind; as its nearest allies are marine, it is difficult to explain how the present form became a cave-dweller. The authors have figured a fish with eyes which was found in the stomach of an *Amblyopsis*. Guided probably by the movements which its prey makes in the water, so sensibly influencing the delicate tactile organs of the blind fish, the latter is enabled to follow rapidly, while the pursued, not having the sense of touch so fully developed, is constantly encountering obstacles in the darkness.

Domestic Dogs in Brazil.—Dr. R. Hensel relates (in the *Zoolog. Gart.* Frankfurt, 1872) his experiences of the domestic dog of Brazil. No well-marked race can be distinguished, with the exception of one used in chasing deer; and European races, introduced into the country, soon degenerate. He instances the pointer, the form of the head of which becomes entirely changed; with every successive generation the skull becomes shorter, finally resembling that of a bull-dog, whilst the ears retain their usual length. Individuals with a very short head had the forelegs curved, so that this change appears to be due to rachitis.

The Aquarium at Berlin.—We find from the annual report of the secretary of this establishment that the income derived from visitors during the year 1871 amounts to 52,955 thalers (7943£), the number of visitors admitted on payment having been 215,828. This is rather more than half the number of visitors who paid for admission to the Zoological Gardens in Regent's Park last year. The price of admission is nearly the same in both cases, but, like all other similar institutions on the continent, the Berlin Aquarium is not only open to the paying part of the public on Sundays, but the price of admission is reduced to one-half during the afternoon of that day.

A new zoological journal has been started in France by Professor H. de Lacaze-Duthiers under the title *Archives de Zoologie expérimentale et générale*. The annual volume will be issued in three parts in octavo (at a price of 32 fr.); the first part contains 144 and xvi pages, and five steel-plates. In a long introductory article on the "Direction des études zoologiques," the editor explains that the journal is intended to take a position in French literature similar to that occupied by Siebold and Kölliker's *Zeitschrift für wissenschaftliche Zoologie*. The first part contains two original memoirs: 1. "Histoire naturelle du *Dero obtusa*," by Dr. Ed. Perrier (pp. 65-96); and 2. "Otocystes ou capsules auditives des Mollusques gastéropodes," by the editor (pp. 97-144). The remaining sheet is devoted to shorter notices and reviews.

Die in Deutschland lebenden Arten der Saurier, untersucht und beschrieben von Dr. Franz Leydig, Tübingen, with 12 plates.—The author intends to give in this work a complete description of the external characters, internal structure, and natural history of the Lizards of Germany. The work is accordingly divided into three parts: 1. A detailed account of the anatomy of the genera *Lacerta* and *Anguis*, with particular reference to the species found in Germany. This is by far the most important part of the work, and may be consulted with advantage by all students engaged in the anatomy of Saurians; those only will be disappointed who seek for myological details. 2. A general account of the biological phenomena. 3. Special descriptions of *Lacerta viridis*, *agilis*, *vivipara*, and *muralis*, and of *Anguis fragilis*. The plates illustrate the first part, and are beautifully executed.

Översigt af K. Vetenskaps Akademiens Förhandlingar, vol. xxvii.—We have received Nos. 8-10, which contain the first part of an account of the Scandinavian Myriopods, by A. Stuxberg; a paper on opercular structures in corals, by G. Lindström; and a highly important contribution to the history of the Oligochaetous Annelids of Scandinavia, with a monograph of the eight species of *Lumbricus* met with in that part of Europe, by G. Eisen.

Bulletin de la Société impériale des Naturalistes de Moscou.—The volume for 1871 contains Dr. J. Knoch's account of his journey to the Volga, undertaken for the purpose of obtaining ova of the sterlet (*Acipenser sterletus*). The greater number of the other zoological papers are devoted to descriptive entomology: Baron de Chaudoir has continued his monograph of *Lebiidae*; M. Ballion makes additions to Gemmingen and Harold's invaluable *Catalogus Coleopterorum*, adds a hundred new beetles to the Russian Fauna, and describes *Leptura Jaegeri* and *Stenura oxyptera*; Messrs. Lindemann, Hochhuth, Erschoff, and Becker have papers on various local Faunes of the Russian Empire; M. Lindemann compares the skeleton of Hymenopterous Insects with that of Coleoptera; and M. Erschoff has critically examined the species of Lepidoptera established by Eversmann.

In the two annual parts (Nos. 11 and 12) of the *Jornal de Scienças matemáticas, físicas e naturais da Academia R. das Sc. de Lisboa* for 1871, Professor B. du Bocage has continued his account of the ornithology of the Portuguese possessions in West Africa, with the description of a new pelican, and notes on *Francolinus rubricollis*; M. de Brito Capello issues the first part of his list of the Fishes from Madeira, the Azores, and West Africa in the Lisbon Museum, and contributes descriptions of new Crustaceans; M. Luso da Silva's Catalogue of the Land and Freshwater Shells of Portugal supplies a great desideratum in conchyliology; it is not completed in the two parts of last year.

The publication of the fifteenth volume of the *Mémoires de la Société des Sciences naturelles de Cherbourg* has been considerably delayed. Observations on zoology are confined to two papers, both by M. Henri Jouan, entitled "Notes sur les Archipels des Comores et des Seychelles" (pp. 45-123), and "Notes de Voyage sur Aden, Pointe-de-Galles, Singapore, Tché-fou" (pp. 169-198). A paper on Lophobranchs by Dumeril is an abstract from his general Ichthyology.

Baumhauer's *Archives néerlandaises des Sciences exactes et naturelles* for 1871 contain an important paper by W. Marshall on the elongated caudal plumes of the birds of paradise (livr. iii. 296). He was aided in his observations by the extremely rich collection of the Leyden Museum, which, we may state in illustration of its completeness, comprises a series of fifty-three specimens of *Paradisea apoda* and seventy-two of *Paradisea regia*, not one of which can be considered a duplicate.—Dr. Bleeker has contributed descriptions of a new *Cirrhilabrus* and *Chilinus* (livr. iv. 326).

A letter from Mr. A. S. Packard, Jun., of Salem, Mass., one of the editors of the *American Naturalist*, directs attention to the report of Dr. Dohrn's investigations on the embryology of the Arthropoda in the *Academy* for 15th January (vol. iii. p. 28). Mr. Packard states that he does not group the Trilobites with the Isopoda, considering them to have no characters in common; while so far from excluding *Pterygotus* and *Limulus* from the Trilobites, he attempted to show (*Amer. Nat.* iv. 498) that the Limuli are closely allied to the Trilobites. It would seem, in fact, that Dr. Dohrn's views have been anticipated about a year.

Physics.

A New Form of Galvanic Battery.—By using a concentrated aqueous solution of potassium permanganate, acidulated with sulphuric acid, in the place of nitric acid, in a Grove's battery, J. H. Koosen (*Pogg. Ann.* 144, 627) has produced an element of greater power, its electromotive force, according to numerous determinations, being at least double that of a Daniell. While the electromotive force of a Grove's element varies according to the strength of the nitric acid, that of the permanganate couple, the author finds, remains the same no matter what the concentration of the liquid: the introduction of a single drop of permanganate solution into the porous cell containing acidulated water at once develops the full force of the current; this of course subsides as rapidly owing to the decomposition of the permanganate. It is well known that in Grove's battery, owing to the evolution of gas, there is a continuous movement of the liquid in the cell, constantly bringing fresh portions of acid to the surface of the platinum plate; when permanganate is used, the dissolved salt in immediate contact with the plate is soon exhausted, and owing to its small diffusive power a fresh supply is not immediately forthcoming, so that the strength of the current sinks rapidly; the slightest agitation, however, suffices to restore it to its original strength. This difficulty the author overcomes by increasing the surface of the platinum plate, constructing it as follows: a number of strips of the same size are cut from very thin sheet platinum, slightly narrower than the diameter of the porous cell, and about 4 cm. shorter than the cell in length; these are placed one above the other and soldered together at either end with gold, at the middle of their narrow ends; a platinum wire, at least 1 mm. thick, is also soldered to one plate as pole wire; the several halves are then so bent apart as to form a cylindrical fan of platinum plates. By dispensing with a porous cell the internal resistance may be greatly lessened; in which case, in order to prevent contact between the platinum and zinc, a cylinder of coarse hair-cloth is loosely placed inside the zinc

cylinder, on this rests the platinum electrode; the whole is charged with water and sulphuric acid, the permanganate (20 to 30 grm. in crystals) being placed in a platinum sieve with meshes not more than 1 mm. in diameter, resting on the zinc cylinder, but separated from it by the hair-cloth, which has therefore to be longer than the cylinder itself.

Relations between the Optical Rotatory Power of Organic Bodies.—F. W. Krecke, in a most exhaustive and interesting memoir (*Archives néerlandaises*, 6 (1871), and *Jour. f. prakt. Chem.*, 5, 6), discusses the subject of circular polarisation and the undoubted relations which exist between the rotatory powers of bodies of the same class, such as the carbohydrates, the cinchona and opium alkaloids, &c. His investigations lead him to the conclusion that the molecular rotatory powers of various carbon compounds obey two laws:—(1) That if an optically active body enter into combination with an optically inactive body, or if it be modified by chemical agents, the molecular rotatory power either remains unaltered or becomes so modified that the molecular rotatory power of the new body is a simple multiple of that of the mother substance. (2) That the molecular rotatory powers of isomeric substances are multiples of one and the same number. Among many others the following examples are given in proof of the existence of these laws:—

GLUCOSSES. (m) = molecular rotatory power.

	(m) =	°
Dextrose (fresh solution)	190·8	: 4 = 47·7
" (old solution)	96·3	: 2 = 48·1
Laevulose ($\ell = 15^\circ$)	190·8	: -4 = 47·7
" ($\ell = 90^\circ$)	95·4	: -2 = 47·7
Galactose (fresh solution)	251·3	: 5 = 50·2
" (old solution)	149·8	: 3 = 49·9
Maltose	286·2	: 6 = 47·7

By dividing the sum of the molecular rotatory powers by the sum of the numbers in the third column, a mean value is obtained for the common factor: $\frac{1260\cdot6}{26} = 48\cdot5$, with the help of which the following results are obtained:—

(m) =	Theory.	Experiment.	Difference.
Dextrose (fresh solution). = $48\cdot5 \times 4 = 194\cdot0$	+ 190·8	+ 190·8	+ 3·2
" (old solution). = $48\cdot5 \times 2 = 97\cdot0$	+ 95·3	+ 95·3	+ 0·7
Laevulose ($\ell = 15^\circ$). = $48\cdot5 \times -4 = -194\cdot0$	- 190·8	- 190·8	- 3·2
" ($\ell = 90^\circ$). = $48\cdot5 \times -2 = -97\cdot0$	- 95·4	- 95·4	- 1·6
Galactose (fresh solution) = $48\cdot5 \times 5 = 245\cdot3$	+ 251·3	+ 251·3	- 8·8
" (old solution). = $48\cdot5 \times 3 = 145\cdot5$	+ 149·8	+ 149·8	- 4·3
Maltose = $48\cdot5 \times 6 = 291\cdot5$	+ 286·2	+ 286·2	+ 4·8

The greatest difference between the calculated and experimental numbers is 8·8°, or slightly above 3%, a difference which certainly is not greater than the possible error of experiment.

SACCHAROIDS.

(m) =	°
Lactose (fresh solution)	323·5 : 13 = 24·96
" (old solution)	202·8 : 8 = 25·3
Saccharose	252·4 : 10 = 25·2
Melezitose	321·8 : 13 = 24·7
Melitose	348·8 : 14 = 24·9
Parasaccharose	369·4 : 15 = 24·6
Mycose (Trehalose)	752·4 : 30 = 25·0

The mean value of the common factor of this group is 24·96°, which is about half that of the factor of the glucose group (48·5°). The following explanation is given by the author of this law of simple relations. In racemic acid we have an optically inactive body, consisting of an equal number of molecules of dextro- and laevo-rotatory tartaric acid, but bodies containing an unequal number of molecules of either modification may be imagined: thus in a compound of 5 mols. dextro- and 1 mol. laevo-rotatory tartaric acid, the action of a molecule of the dextro-rotatory acid would be neutralised by that of the laevo-rotatory, and such a mixture would consequently have $\frac{1}{2}$ of the rotatory power of dextro-tartaric acid. A compound of 4 mols. dextro- and 2 mols. laevo-rotatory acid would only exert $\frac{1}{2}$ of the rotatory power of dextro-rotatory acid. To apply this theory to other substances, it is merely necessary to select from each group of bodies possessing a common factor that one which rotates most to the right, and to oppose to it that which rotates equally in the opposite direction, then all the remaining members of the group we may consider to be formed by the union of varying numbers of molecules of these two. If, in the case of the glucoses, the molecular rotatory powers of which are to each other as 4 : 2 : -4 : -2 : 5 : 3 : 6, we assume that besides the dextro-rotatory maltose there exists one of exactly equal laevo-rotatory power, and if for convenience it be supposed that all these bodies consist of twelve molecules, they may be considered as composed as follows:—

Dextrose (fresh solution)	10 mol. + maltose and 2 mol. - maltose
" (old solution)	8 " + " 4 " - "
Laevulose ($\ell = 15^\circ$)	2 " + " 10 " - "
" ($\ell = 90^\circ$)	4 " + " 8 " - "
Galactose (fresh solution)	11 " + " 1 " - "
" (old solution)	9 " + " 3 " - "
Maltose	12 " + " 0 " - "

In his *Index of Spectra*, Dr. Watts has collected from every source measurements of the spectra of the elementary bodies, and reduced them to a uniform scale of wave-lengths. Great confusion has arisen from the use of different scales in the mapping of strata, as well as from the varied dispersive powers of the materials forming the prisms, and from other causes. In dispersion spectra the relative breadth of the colours differs according to the nature of the prism, and it is evident that the exact position of a line can only be indicated by its colour; in other words, by the length of the wave of light producing it. In a diffraction spectrum the position of a line depends solely on its colour, and never shifts, no matter by what method the spectrum be formed. For the positions of lines to be comparable, the spectra must either be diffraction spectra or the observations made with prisms must be reduced to wave-lengths either by graphical interpolation or by aid of the formula used by Gibbs. Dr. Watts has based his calculations on Ångström's measurements of the wave-lengths of the principal Fraunhofer's lines, and under the name of each element (and air) he has tabulated the results of the examination of each line in vertical columns, the first of which gives its number when met with in Bunsen's first drawings; others the wave-lengths calculated from the observations of Ångström, Huggins, Kirchhoff, Plücker and Hittorf, Thalén, and others; and the last the intensity of the line roughly estimated. At the end of the index are drawings of the spectra of each element made on Bunsen's plan and arranged alphabetically: they represent the dispersion spectra, and are those referred to in the first column of the tables. The intensity of a bright line is in each case indicated by the altitude of the line which marks its position.

Spectroscopic Examination of the Aurora of 4th February.—Many communications have been received by the Academy of Sciences in Paris respecting this very fine aurora. M. Cornu noticed a yellowish-green band coincident with that observed by Ångström in 1867-68. M. Prazmonski also found a green band near Fraunhofer's line E, and possibly identical with Cornu's line, a red band near C, and two very faint ones in the blue and violet near F and G. M. Salet, in a paper sent to the Société chimique (*Revue scientifique*, 9th March, 1872) attributes the red line to the inversion of an atmospheric ray, and has not detected the substance producing the yellowish-green ray ($\lambda = 557$). He examined the gas occluded by the Lenarto meteoric iron for it, but found only the rays due to hydrogen and carbonic oxide. It should be mentioned that several English observers have recorded in recent numbers of *Nature* their observations on the green line, and others in the more refrangible portion of the spectrum.

Mr. Backhouse, of Sunderland, states in the *Times* of the 9th instant that T Coronae Borealis, the star which in 1868 burst forth so suddenly and then waned to telescopic size, and which for the last two years has not varied perceptibly in brightness, is now fading still further.

New Publications.

ASKENASY, E. Beiträge zur Kritik der Darwin'schen Lehre. Leipzig: Engelmann.

ASTRONOMISCHE-GEODÄTISCHE ARBEITEN im Jahre 1870. Herausg. von C. Bruhns. Leipzig: Engelmann.

ENGLER, A. Monographie der Gattung Saxifraga. Breslau: Kern.

GÜNTHER, S. Studien zur theoretischen Photometrie. Erlangen: Besold.

HARTMANN, F. Handbuch der allgemeinen Pathologie. Erlangen: Enke.

JELLETT, J. H. Treatise on the Theory of Friction. Dublin: Hodges, Foster, and Co.

ORMATHWAITE, Lord. Astronomy and Geology Compared. Murray.

PETTENKOFER, M. v. Ueber Oelfarbe und Conservirung der Gemälde-Gallerien durch das Regenerations-Versfahren. Braunschweig: Vieweg.

WOLF, R. Johannes Kepler und Jost Bürgi. (Rathaus-Vortrag.) Zürich: Schulthess.

ZÖLLNER, J. C. F. Ueber d. Natur d. Cometen. Leipzig: Engelmann.

History.

The History of the Norman Conquest of England, its Causes and its Results. By Edward A. Freeman. Vol. IV. Oxford: at the Clarendon Press, 1871.

OWING chiefly to increasing difficulties, the progress made by this great work from the third to the fourth volume has been a little slower than is customary with its energetic author. However, the pause has not been to the disadvantage of the production itself. After having bestowed in the preceding volume a wonderful amount of learning, art,

and affection on one single year and its hero Harold, the author had to adhere to the proportion of the book as designed by himself from the beginning. The decisive catastrophe of Senlac is succeeded by the Conqueror's reign, and the current of events becomes both broader and at the same time more rapid. There are some who have objected to Mr. Freeman an overweening fervour for his favourite. They will now probably complain of a certain lack of admiration for William, which of necessity becomes more apparent in the course of the history of his reign. But are there not many reasons for a certain coolness on moral grounds as well as on critical? We would invite those critics to try the same nice balance of the original materials as it is applied by Mr. Freeman throughout this almost ponderous volume. Very probably they will agree with us that full justice has been done to the Conqueror in strict accordance with his real merits and demerits, with the increasing and declining elevation of his most extraordinary character. Is there, indeed, any due acknowledgment withheld from William, the most sagacious politician of his age? "In this present matter"—as supreme judge—"Aelfred and Cnut could have done no more than William did" (p. 368). Ever and again we are referred to the bright passages of his history, for instance his relations to Lanfranc, John the Italian abbot of Fécamp, and Vital of Westminster, which show him in the most favourable light (cf. 402). Upon William's refusal to do homage to Pope Gregory VII. even Mr. Freeman forgets for a moment the stern foreign ruler of the English. On the contrary he rejoices in the English spirit of the celebrated answer, which declined fealty, but faithful to precedent admitted the regular payment of Peter's pence. "The simple dignity, the crushing logic, of these few words of William the Great form a marked contrast to the foul calumnies and wild invectives which the partisans of Pope and Caesar were hurling at one another in other lands" (p. 433). Is there unfairness in the full view upon the darker side of such a man if we remember the greater prominence of this darker side during the later years of his rule, his genuine Norman cruelty in the harrying of Dorset or the sacking of the North, the exceptional capital punishment of Waltheof, his practical despotism, moving like that of Henry VIII., if possible, in strictly legal and constitutional forms, the state of *unlaw*, as the Peterborough Chronicle calls it, to which his consistent and harsh policy was in the end leading?

It is needless to enlarge upon the well-known sterling qualities of Mr. Freeman's historical art, his lucid arrangement of a very unwieldy material in the only adequate chronological order, and his forcible style, adopting occasionally as its pattern the Old English of the Chronicler (see the use of the epithet *stark*, pp. 316, 620). The author knows how to bridle the imaginative power, which so very often becomes fatal to the true objects of the historian. Sparing in mere conjecture, he provides the reader, if possible, in each case with the evidence for and against every particular conclusion, that he may judge for himself. Perhaps there is now and then a want of perspective in the importance attached to small matters and great, especially where minor personal, local, or antiquarian notices are chiefly used for filling up the gaps and breaks which unavoidably occur in our historical knowledge of a comparatively early century. Mr. Freeman aspires with a rare impartiality to the same accurate completeness in the different auxiliary disciplines, comparative philology and etymology, chronology and genealogy, diplomatic and legal antiquities, without a certain mastership of which the consummate writing of history is impossible. Throughout the volume again we trace the fruits of his favourite researches in architectural history, in geography,

and topography. It is quite characteristic of him that he should prefer "to look on a town as a whole with a kind of personal history, instead of simply the place where such and such a church or castle was to be found;" and to insert a special excuse why after having investigated most carefully every important place, Stafford had been by accident omitted (p. 318). Indeed, this even and scrupulous exactness of detail is the most eminent virtue of our author, as it is the basis and foundation of a truly methodical structure. There is no other work of an English historian which of late has won more readily the heart of the predominating historical school in Germany, not so much on account of its fervid Teutonism, but simply because by the application of strict scientific principles in sifting the sources it brings out successfully many points which have never been brought out before. There is no greater charm for the student than seeing from page to page in an abundance of notes, and in a copious supply of separate investigations reserved for the appendix, as in the former volumes, with how much skill and experience the materials are handled. A great deal of excellent minute criticism is bestowed on the Saxon Chronicles, the Worcester and the Peterborough copies, whose documentary value, as is well known, increases the nearer they approach their end; on Ordericus Vitalis, the *one* author who is English, French, and Norman at the same time, especially in his relation to the incomplete work of William of Poictiers; on William of Malmesbury; on the valuable Northumbrian interpolator, known generally by the name of Simeon of Durham, and on some other chief authorities. Perhaps it is not superfluous to point out the great assistance which an author like Mr. Freeman will necessarily derive from the great number of new editions, either in the series of the Master of the Rolls, Dimock's *Giraldus Cambrensis*, Luard's *Annales Monastici*, Hamilton's *Malmesbury (Gesta Pontificum)*, Stubbs' *Roger of Howden*, or separate as Mr. Hinde's *Simeon of Durham*, published for the Surtees Society, or Mr. Earle's excellent *Two of the Saxon Chronicles parallel*. And does there exist a more unique document for the Conqueror's reign than *Domesday*? Indeed, everybody without hesitation will subscribe the words (p. 691): "No other nation has such materials to draw upon for its history." It is utterly amazing what a mass of personal and local detail may be recovered from its incidental entries. Though referred to always and by everybody, *Domesday* has never before been so universally and on the whole successfully made use of as by Mr. Freeman. Besides elucidating the general tendency of the great survey, the legal fiction of the king, who never forgot to play the part of legitimate successor to Eadward the Confessor, the system of legal spoliation carried out with increasing rigour the more he pushed on his conquest north and west in the face of renewed rebellions and invasions—we meet with numberless inestimable touches, which, thanks to William's commissioners, have been preserved as belonging to great and small personages of the time, to localities and events. There may be, indeed, some cases where our author rather stretches his combinations of these notices beyond what is plausible. Certainly, he distinguishes most carefully between the different epochs of the Conquest, and by the very arrangement of his book insists on the interruptions which were occasioned by William's expeditions in Normandy and Maine, or by the chances of a more friendly intercourse with Malcolm of Scotland and even with Swend of Denmark, the chief protectors of so many English fugitives. But nevertheless there not unfrequently remains a margin of doubt and difficulty with respect to the chronology of entries in *Domesday* assigned with too little auxiliary evidence to particular dates between 1067 and 1086.

It is hardly necessary to mention that whatever has appeared in modern literature, English and foreign, bearing on the general subject or its details, has not been overlooked by our author. He reserves a special quiet humour, however, for Thierry's *Histoire de la Conquête*, bringing to book in the pleasantest way its more than romantic statements.

After speaking as we have done of the *technique* of the work, there remains but little space for the more common task of the reviewer. Moreover, Mr. Freeman has been long enough under the eyes of a very fastidious class of readers for them to have made up their minds about the intrinsic value of his writings. As for our own part, we confess that we have been attracted not so much by the more graphic portions of the volume, treating of the English and continental campaigns, of the personal history and dismal end of the Conqueror, as by the chapters which discuss the acts of the statesman. The glimpses into the municipal existence of such places as Exeter, Lincoln, Cambridge, Chester, and of certain early civic federations, whose independence fell a prey to the jealousy which never permitted his Norman and English tenants to accumulate much property in one and the same shire, are brought out in Mr. Freeman's happiest style. These and the other distinct causes by which England became permanently consolidated in a united kingdom appear with adequate clearness.

The few genuine remains of William's legislation are distinctly stated in perfect accordance with Professor Stubbs' *Select Charters*, p. 80. The great chapter on the ecclesiastical settlement, the combined church policy of William and Lanfranc, at once orthodox and yet independent; which Pope Gregory VII. himself did not venture to depreciate, stands like a gem set with natural and therefore the very best taste in the centre of the volume. As in William's dreary later years, the interest falls off fast owing to the severe and rapacious monotony of his despotism and the general change from victory to defeat, it is hardly otherwise with his later legislation. The midwinter gemót at Gloucester in 1085-6 would never in constitutional interest reach up to the scíre-gemót on Pennenden Heath in 1072 if the commission for the great survey had not been issued by the former. Yet these were the days in which the English Conquest struck root after all. Who will not regret that the general and special examination of *Domesday* in connection with the most palpable and the most enduring results of the Conquest, which just here would have been in their place in the text as well as in the notes of the appendix, had to be reserved for the next and last volume on account of the great bulk of the present. We doubt whether the author will be able to work out his epilogue in some seven or eight hundred pages more and still do full justice, as he promises, to Earl Simon and King Edward I.

We conclude with a few suggestions and corrections from our notes taken during a careful perusal of the most substantial book ever written on the subject, as it is not unlikely that one or the other may find acceptance in a second edition.

The author points out in two different pages (41 and 85) that the English, so famous themselves in the art of jewelry and gold embroidery, were supported by skilful Germans. He justly combines Will. Pict. 155, "Ad hoc incolere apud eos Germani solebant talium artium scientissimi," with several entries in *Domesday* about Theodoric or Tedric, "Otto aurifaber, Grimbaldus aurifaber." Some other foreigners settled in England by William, "Heppo balistarius, Odo arbalistarius" (pp. 215, 216), are most probably of the same origin, the name of the first being pure High-Dutch, and the same craft being represented very frequently by their countrymen in the later days of Henry III. and the Edwards.

Among the auxiliaries of Swend's expedition in support of the English insurgents in 1069, Ordericus Vitalis, 513 B.C., mentions Poles, Frisians, and continental Saxons, and goes on to say, "Leutecia quoque pro Anglis opibus auxiliares turmas mittebat." This is interpreted by Mr. Freeman, though with some reluctance, by *Lithuania*. With a zeal above praise he very rarely omits going to the very fountain-head in continental history as well as in English. If he had turned this time to William's contemporary, Adam the canon of Bremen, Pertz, vii. 312,* he would have found: "Ultra Leuticios, qui alio nomine Wilzi dicuntur, Oddara flumen occurrit, ditissimus amnis Sclavoniae regionis." An imperial statesman, Wibald Abbot of Stabio and Corvey, the contemporary of Orderic, writes in one of his letters, dated 1149: "intraveramus cum armata milicia et exercitu christianorum principum terram Leuticorum, transmisso Albi flumine," see Jaffé, *Bibliotheca Rerr. Germ.* i. 244. Here is meant undoubtedly the Slavonian tribe inhabiting western Pomerania, the country opposite the isle of Rügen. It is Orderic's ignorance, the reverse of Sir Walter Scott's in *Ivanhoe*, which makes them worship Teutonic deities instead of their national Czerni Bog.

The volume, as it appears, retains more misprints than commonly occur in the excellent works issued from the Clarendon Press: e.g. p. 349, No. 3, Paul Bernfried instead of Bernried; and p. 423, No. 2, Pertz, iii. 362, instead of Pertz, vi. 362.

Now and then Mr. Freeman prefers an inferior text, when a better was at hand; cf. 435, 436. Everything that Dr. Giles has edited—and his edition of Lanfranc's Letters does not make an exception—is done in a most slovenly manner. A letter of Gregory VII. to the archbishop, quoted p. 411, No. 2, occurs likewise in the much safer text of the *Registrum Gregorianum*, edited by Jaffé, *Bibliotheca Rerr. Germ.* ii. 49, and there is not the least doubt that *vii nostrā* is to be altered into *vice nostrā*, and the perfectly inadmissible *singulis* into *singularis*. But it is much the same with the copies of papal letters in Labbe's *Concilia*. In an epistle of Hildebrand, quoted p. 431, No. 2, is to be read: "Haec ideo, karissime, tibi inculcavimus," see Jaffé, ii. 89; and in another place, quoted p. 431, No. 3, and dated most precisely May 8, 1080: "ut cura et dispensatione apostolica dignitas post Deum gubernetur regia," Jaffé, ii. 419, instead of the falsified sentence: "ut cura et dispensatione apostolicae dignitatis post Deum gubernetur regia."

With regard to the coronation of the Emperor Henry IV. at Easter 1084 or 1085, we are referred to the authorities collected by Struvius, i. 389, about 150 years ago. There is now not the least doubt about the year, as we have a charter of the emperor himself, dated from St. Peter's, March 21, 1084. See Stumpf, *Die Kaiserurkunden des 10., 11. und 12. Jahrhunderts*, No. 2854; and Giesebricht, *Geschichte der deutschen Kaiserzeit*, iii. 1122.

Mr. Freeman shows exceedingly well what is to be thought of the alleged design of Anno, Archbishop of Köln, to make William the Conqueror interfere in Germany, and of Henry IV.'s wish to win him over in conjunction with the King of Denmark as an ally against his own rebellious Saxon subjects—stories told in different versions by two German authors of the time, Lambert of Hersfeld, and Bruno, *de Bello Saxonico*. As for the first, Mr. Freeman, p. 539, joins the praises of Dean Milman, *History of Latin Christianity*, iii. 168: "whom no incompetent judge has placed at the head

* Page 356 of the same author is also worth referring to, as it contains the contemporary opinion in Germany concerning Harold and the reforms carried out by William the "Bastard" and Lanfranc the "Philosopher."

of all the historians of the middle ages." This unqualified laudation is out of date at least with German critics, especially since Ranke's paper in the *Transactions of the Berlin Academy*: *Zur Kritik fränkisch-deutscher Reichsannalisten*, 1854. See Wattenbach, *Deutschlands Geschichtsquellen im Mittelalter*, 321 ff. 2nd ed.

R. PAULI.

History of the 'Imâms and Sayyids of Omân by Salîl-Ibn-Razîk, from A.D. 661–1856. Translated from the original Arabic, and edited, with notes, appendices, and an introduction, continuing the history down to 1870, by G. P. Badger, F.R.G.S., late Chaplain in the Presidency of Bombay. With a Map. Printed for the Hakluyt Society.

THE geographical position of Omân, the south-eastern corner of Arabia, to the history of which the present volume is devoted, is a very isolated one. A range of mountains traverses the whole country from Râs-Musandim to Râs-alhadd, dividing it into an eastern part from the mountains to the sea, and a western part the limits of which disappear in the great desert Al'ahkâf. The former with the important towns Maskat, Almatra, Alrastâk, and Sohâr, is chiefly the territory of Omâni history. There is scarcely any natural connection between Omân and the countries to the north (Albahrain) and south (Mahra, Hadramant, and Yemen). Hence Omân has always been very slightly affected by the fate of the remainder of the Arabian peninsula. It led a life by itself, and was more concerned in the affairs of Persia, Balûcistân, and India than of Syria and Mesopotamia, the chief theatres of Muhammadan history.

Omân did not submit to the authority of the khalifs of the house of Omayya till the time of 'Abd-almalik (died A.D. 705), under whom the famous Alhajjâj, then governor of Irâk, succeeded in subduing it. But not more than half a century later (A.D. 751) the Omânis threw off this yoke under the first of the Abbâside khalifs; they elected a ruler from the tribes of their country, and have always, from that time till the present, been independent of the whole Muhammadan world. Their war of liberation was brought about not only by political, but also by religious motives. A sect of the Khawârij, who derive their system and name (Al'ibâdiyya) from one 'Abdallâh b. 'Ibâd Tamînî, spread over the whole of Omân towards the end of the rule of the Banû Omayya. Native leaders seem to have favoured this movement, and the war against the generals of the Banû Abbâs was not only one against foreign intruders, but also a war against a different confession, the Sunnite Islâm. The 'Ibâdi creed has ever since been the state religion of Omân.

The chief object of the author of this chronicle, called "A plain and authentic exposition of the Chronicles of the Sayyids of the Âl-Bû-Sa'id" (*sic*), was to narrate the history of Sa'id b. Sultân, who ruled over Omân and Zanzibar A.D. 1804–1856. In the third book he treats exclusively of this prince, whilst in books i. and ii. he delineates the previous history of the country. The first book extends from A.D. 751–1741, containing an account of the princes who were elected from the tribes 'Azd, Yahmâd, Kindâ, Nabhân, Hinâ, Ya'rûb, and Ghâfir. In some parts the account is very meagre. For the period A.D. 1154–1435 we get only scanty extracts, not even a list of the rulers of the country. It is of some interest to learn that it was as far back as the time of 'Abdalmalik (died A.D. 705) that some Omâni tribes, on being pressed by the generals of Alhajjâj, emigrated to Zanzibar, which from that epoch till A.D. 1856 formed a dependency of the empire of Omân. The first volume concludes with the history of the rise of the family Âl-Bû-Sa'id, who still hold sway in Omân and Zanzibar. The founder of this

dynasty, 'Ahmad b. Sa'id, seems originally to have been a rich and influential merchant, who first came into power towards the end of the rule of the Ya'rûbî dynasty. Whilst the sovereigns of the latter ruined each other by endless intestine broils, the Persians invaded the country A.D. 1737, under pretence of bringing aid to one of the contending parties. They ravaged the whole country indiscriminately for several years, and it was 'Ahmad, then commander of the fortress Sohâr, who succeeded in expelling them A.D. 1741. In recognition of his eminent services, the people elected him ruler of the country. The second book contains the history of his reign and that of his descendants from A.D. 1741 as far as 1804.

The first two books were composed during the reign of Sa'id b. Sultân (that is, before 1856), and dedicated to a nephew of this prince, Sayyid Hâmid b. Sâlim b. Sultân. The third book was composed after the death of Sa'id (19th October, 1856), whose history it contains. But it was not finished by the author himself, because at the end there is a note, dated 12th December, A.D. 1857, stating that it was finished by one Hamîd b. Muhammâd b. Razîk, whilst the name of the original author is Salîl. Accordingly Salîl must have died between 19th October, 1856, and 12th December, 1857, and his work was finished by a relative of his, as we shall see hereafter.

Mr. Badger calls the author, on the authority of his MS., Salîl-bin-Razîk. But this is a mistake for Salîl b. Muhammâd b. Razîk. The author speaks in several places of his father and grandfather, who held successively the post of clerk of customs at Maskat, and played a not insignificant part in the history of Omân (v. pp. 135, 148, 153, 158, 165, 204, 216, 222); his grandfather he calls Razîk b. Bakhit, his father Muhammâd b. Razîk. Hence it seems evident that that Hamîd b. Muhammâd b. Razîk, mentioned in the note on p. 370, who continued and finished the work of Salîl was his brother.

Originally the ruler of Omân was called 'Imâm. He was the religious and political head of the people and freely elected—according to the tenets of the 'Ibâdiyya creed—but "with a strong preference to the ruling family over strangers, and with a strong preference in favour of the son, not necessarily the eldest, of the last 'Imâm over the other members of his family." This title has become obsolete since the death of Sa'id b. 'Ahmad (between 1811 and 1821). During his actual rule, from A.D. 1775–1779, he made himself so odious to his people that his son Hâmid found it easy to insinuate himself with the people of Omân, and gradually obtain possession of all the forts, including Maskat. Hâmid was acknowledged by all the chiefs; he resided at Maskat, and governed the country as an independent chief till his death in 1792. He retained his former title "Sayyid," which means "Prince of the royal house," as all his successors have done up to the present time. Meanwhile his father Sa'id, the legitimate 'Imâm, lived in retirement without having any influence on the affairs of the country, at Alrastâk, and died unnoticed, between 1811 and 1821. By his death the 'Imâma became vacant, but it has not been filled again. The 'Imâma was superseded by the Siyâda; the name being changed, the office remaining the same.

Mr. Badger has doubtless rendered an important service to the history of the East by translating this work of Salîl. With the exception of a portion of "the opening book, which consists mainly of genealogies of the Arab tribes of Yemen, and a few irrelevant episodes and laudatory poems," he has translated the whole. In the foot-notes many explanations are added, and the appendices, "On the Title of 'Imâm," "The 'Ibâdiyya," "An Account of the Murder of 'Ali," will

be found very useful for the general reader, though they scarcely contain anything that is new to the professed scholar. For the benefit of those who find it tedious to wade through the monotonous account of the Arab chronicler, Mr. Badger has composed a history of Omân of his own, based upon Salil's work. And this part ("Introduction and Analysis") is particularly valuable, because he has added an account of the latest history of the country from 1856 till 1870. For this task he was eminently fitted, being acquainted not only with the country, but also with several of its leading men, for all which interesting matter we may refer to the "Editor's Preface."

Not knowing the Arabic original whence this translation was made, we cannot judge whether it is accurate or not; but we can say this much, that it is very readable. Regarding the numerous geographical names, the pronunciation of which was not always certain, we should have advised the translator to give not only his mode of reading them, but also the Arabic forms, as he found them in his MS. In doubtful cases this would have greatly facilitated any attempt at emendation. A very valuable portion of his work, which contains such a store of positively new information, is that referring to the relations between the Wahhâbîs and Omân, which will have to be carefully perused by the future historian of Wahhâbism. Lastly, we may mention that Mr. Badger frequently criticizes the "brilliant pages" (as he calls them) of Palgrave's *Central and Eastern Arabia*. He proves that all the assertions which Palgrave makes regarding Omân are just "a tissue of fallacies from beginning to end"—notwithstanding which he loads the author with compliments!

ED. SACHAU.

Contents of the Journals.

Revue des Questions Historiques, Jan. 1.—Contains an article on Charles de Blois, Duke of Britanny, trying to refute the charges against him on the ground of his pious character. Unhappily this was in that age compatible with excessive cruelty and many acts that we should consider monstrous.—A better notice follows on Augustin Thierry's mode of interpreting the Frankish proper names.—A summary is given of some new works on Massillon, and a reply made to the recent attempts at rehabilitating Pope Alexander VI. (Borgia).—In a notice of the *Gallia Christiana* the writer complains that Haureau, the continuator of that great work, does not allow, any more than the able Benedictines whose work he has continued, "the apostolical origin of certain churches in Gaul."

Theologisches Literaturblatt, Feb. 12.—Contains an interesting review by v. Schulte of Zoepfel's *Papal Elections and the Development of their Ceremonial from the Eleventh to the Fourteenth Century*. (See notice by Prof. Pauli in *Academy*, vol. ii. p. 561.)—A notice follows of Nikolaus von Flüe, the Swiss soldier who became a hermit, and had great influence among his countrymen, which he showed especially in the important meeting at Stans, Dec. 22, 1481. His life illustrates the epoch of Charles the Bold of Burgundy, when the Swiss became a leading power in Europe.

Literarisches Centralblatt, Feb. 10.—Contains a review of Ranke's important book, *Der Ursprung des siebenjährigen Krieges*, which we shall notice ourselves very shortly. The influence of the Jesuits on Louis XV.'s mistress, Madame de Pompadour, in bringing about a close union of the Catholic powers, is specially noticed.—Feb. 17.—Analyses Büdinger's *Untersuchungen zur mittleren Geschichte*, which criticises the mediaeval chroniclers Liudprand, Bishop of Cremona, Ruotger, &c.—March 2.—Notes Palacky's *Zur böhmischen Geschichtsschreibung*, an account of his literary life and difficulties. He had to pay Monsignor Marini, the head of the archive department at the Vatican, nearly all the sum allowed him for his journey to Italy; and the censorship at Vienna made him blame John Huss's "obstinacy and pertinacious self-will," though Palacky's account of Huss by no means corresponded to this character of the great Bohemian reformer.

Gött. gel. Anzeigen (Nachrichten), Feb. 14).—Dr. Matz communicates an account of "Early Lists of Antiques," which are as valuable for the history of art as the early manuscript collections of inscriptions are for the *Corpus Inscriptionum*. Some of these lists are among the Queen's collections at Windsor.—Wachsmuth reviews Schmidt's *Das Volksleben der Neugriechen und das hellenische Alterthum*.—Feb. 21.—Tobler reviews Paul Meyer's *Les derniers Troubadours de la Provence*. The use made of some of them by Nostradamus is noted

as curious.—Liebrecht analyses *La Leggenda della Reina Rosana e di Rosana sua Figliuola*, an Italian version of the romantic old French story of "Flore and Blanchesflor," but with a more religious tone infused into it.

New Publications.

PARKER, J. H. The Ashmolean Museum of History and Archaeology. Oxford : Parker.

URKUNDENBUCH, Wirtenbergisches. 3. Bd. Stuttgart : Aue.

WATTERICH. Die Germanen d. Rheins (die Sigambren u. die Anfänge der Franken). Leipzig : Duncker.

WOLFF, O. Geschichte der Mongolen. Breslau : Dölfer.

Philology.

New Date for the Jerusalem Talmud. [Gib'eth (Gib'ath) Jeruschalaim. Eine Studie über Wesen, Quellen, Entstehung, Abschluss und über den Verfasser des Jer. Talmuds, von J. A. Wiesner. Wien.] In Hebrew.

IT is only a short time since Prof. Grätz surprised us by announcing the late composition of Ecclesiastes (*Academy*, vol. ii. p. 476), and the Canticles. Scarcely recovered from the shock, we are informed by Rabbi Wiesner, well known by his learned scholia on part of the Talmud of Babylon, of an equally surprising result about the Talmud of Jerusalem. Up to the present time, as we have had occasion to state in the *Academy* (vol. i. p. 192), this Talmud was believed to have been compiled in the first half of the fifth century. Rabbi Wiesner, however, produces striking arguments to show that its compiler imitated the Talmud of Jerusalem, which was finished somewhere about 600 A.D. In a review cited above, we have mentioned the remarkable fact that the two Talmuds do not quote one another. Now, if the Jerusalem Talmud had been written in 450, the doctors of Babylon must have been aware of it, as there was a pretty regular communication between the two countries. On the other hand, if it was a plagiarism, the absence of quotations was necessary to give it an appearance of antiquity. Here is another link in the chain of evidence. It has been conclusively shown by Rapoport (the late chief rabbi of Prague), as well as by Dr. Frankel, the profoundly learned director of the rabbinical school at Breslau, that neither Simon of Kairowan nor R. Aha of Sabbath (in Babylonia), both of the second half of the eighth century, had any notion of the existence of a Jerusalem Talmud. The latter, who migrated to Palestine, where he died, ought certainly to have heard something of the Talmud of Jerusalem—a fact which makes it all but certain that the process of compiling it was not ended before 760, the date of R. Aha's treatise called *Sieelthoth*. We must now advance another striking fact. The well-known R. Saadyah Gaon (tenth century) appears to have learned the existence of this Talmud from the Karaite Salmon ben Yruham, who brought it from Palestine to Babylonia. Again, R. Haya Gaon in Babylonia (eleventh century), as Rapoport has observed, either did not know the Talmud of Jerusalem at all or knew it imperfectly. Now, is it conceivable that the Geonim, living after the close of the Talmud of Babylon, and spending their lives in commenting on this Talmud, making compendia and settling questions of casuistry from it, should have ignored an earlier Talmud, composed on holy ground? They could not certainly have been influenced by a dislike to the ancient Palestinian schools, such as led the doctors of the Talmud of Babylon to ignore that of Jerusalem, according to some critics.

And now let us turn to the evidence supplied by the Talmud itself. The compiler, as Rabbi Wiesner shows, was imprudent enough to leave several indications of recent origin, e.g. Karaite interpretations of the Law (the Karaite

sect is known not to have begun earlier than 754). Again, the Talmud of Jerusalem has liturgical formulæ, and references to synagogue-usages, not known to the doctors of the Babylonian Talmud. It also gives directions for fixing the times of the feasts by astronomical calculations, introduced probably not earlier than the end of the eighth century, for previously they were fixed by the new moon, as they are still among the Karaites. It would even follow from one passage that the compiler was acquainted with the vowel-points.

We are quite prepared to be told by conservative critics that all the above-mentioned passages are interpolations, for Rapoport has proved that there are many interpolations in the Talmud of Babylon. But what can be said to the numerous passages, cited by Rabbi Wiesner, where the Talmud of Jerusalem is in flagrant and deliberate contradiction to that of Babylon? Besides, a large number of passages in the Talmud of Jerusalem are incomprehensible, until they are explained by parallel places in that of Babylon. Either there are frequent omissions in our copies of the Talmud of Jerusalem, which is improbable, or, as we think, the compiler wrote against time, and made nonsense in shortening passages of the other Talmud, which perhaps he also misunderstood. He even goes so far in his imitation as to speak of two revisions of the Jerusalem Talmud, because it is stated that the Talmud of Babylon was thrice revised by R. Ashi, its first compiler. Rabbi Wiesner makes no remark on the language of the Jerusalem Talmud, which seems to us to be artificial, and of late date. It has much resemblance to that of the Samaritan Targum. Neither does he make any suggestion as to the author's object in the mystification. That problem he leaves for the historians. It is remarkable, however, that the Geonim have always shown a certain reserve in the use of this Talmud. They quote it but seldom, and whenever it contradicts the Talmud of Babylon, they blindly follow the latter. Dr. Geiger has asked, How could R. Saadyah and others have been taken in by such an imposture? but the venerable delusion, which is far from being extinct, about the *Zohar*, and many another like it, supplies an answer. Only thirty years ago that famous Cabalistic book was ascribed to R. Simon ben Yohai (second century), but critics are now agreed in bringing it down to the thirteenth century. May we not add that personal ambition goes far to explain the origin of such mystifications? We now await the criticisms which Rabbi Wiesner's pamphlet cannot fail to elicit from Dr. Geiger, Prof. Grätz, and others. If his idea should be confirmed, Talmudic philology will appear under a new light, and the parallel between sayings of the Gospels and the Talmud of Jerusalem must be definitely set aside.

AD. NEUBAUER.

Inedita Syriaca. Eine Sammlung syrischer Uebersetzungen von Schriften griechischer Prosaliteratur . . . herausgeg. von Dr. Ed. Sachau. Wien, 1870.

THE scantiness of the profane element in Syriac literature is a fact which has not yet been adequately accounted for, though its explanation naturally presents itself to anyone long conversant with the authors of Syria. It is the Christian spirit that pervades their works which supplies the key to their selections from Greek literature; it is this which enables us to understand their preference of Aristotle, Plutarch, Lucian, and Themistius to the brilliant but distinctively pagan creations of the Attic muse. The few profane works extant in Syriac are mostly translations from the Greek, and these are seldom complete; Aristotle himself, notwithstanding his immense reputation in the age when Christian Syria was in her bloom, and Mussulman Asia was reposing from

conquest in the pursuits of literature, never had the distinguished honour of an entire translation.

And even the Nitrian manuscripts deposited in the British Museum, though they reveal to us works of whose existence we had no suspicion, would only supply the material for two such volumes as the *Inedita Syriaca*.

Dr. Sachau has formed the design of supplementing the texts already published by Prof. de Lagarde and Prof. Land. A treatise of Lucian on *Calumny*, two discourses of Themistius on *Virtue*, and on *Friendship*, some sentences extracted from the works of Plato, some proverbs, or aphorisms of moral philosophy, of more or less doubtful authenticity, make up the contents of his book.

This simple statement shows the justice of the observations we made respecting the principle which directed the Syrian translators in their selection. It is the more necessary to give this a passing notice as it finishes the only reasonable explanation of a fact which has drawn some censure on the translators: we mean the licence exercised by them in modifying, abridging, or partly omitting, the original texts. This procedure is the more surprising as they show themselves in other places to be models of fidelity. But our surprise ceases when we perceive that these arbitrary changes are limited to words capable of wounding the pure and delicate feelings of Syrian Christians, to facts calculated to scandalise a Christian imagination, to allusions, obscure, or too closely connected with pagan mythology.

The want of exactness in the Syrian translator is therefore not the result of negligence or incapacity, but of a pre-conceived idea, a definite system. And let it not be supposed that this is a groundless hypothesis. A collation of a few passages of the *Inedita Syriaca* with the Greek will amply justify our assertion. For instance, the four inaccuracies in the first six chapters of Lucian's work on *Calumny* can only be thus accounted for. When the Greek reads, *τοιγάρτοι μυρίας ἥδη τοῖς τραγῳδιδασκάλοις ἀφορράς εἰς τὰ δραματα τὸ τοιοῦτο παρέσχηται, τοὺς Λαβδακίδας καὶ τὸν Πελοπίδας καὶ τὰ τούτοις παραπλήσια σχεδὸν γὰρ τὰ πλεύστα τῶν ἐν τῇ σκεψῇ ἀναβαίνοντων κακῶν εἴροι τις ἀν ἐπὸ τῆς ἄγνοιας καθάπερ ὑπὸ τραγικοῦ τυρού δαίμονος κεχορηγημένων λέγω δὲ καὶ κ.τ.λ.—the translator merely says, “It is by ignorance that we furnish the material for so many such stories relating to us” (*Ined. Syr.* p. 1, l. 2; cf. de Lagarde, *Abhandl.* p. 120, &c.). A little further on (p. 3, l. 23), after the words, “This statue had large ears,” the translator has omitted an allusion only intelligible to a reader familiar with Greek mythology, *μικρὸν δεῖν τοῖν Μίδον προσεοικότα*. P. 4, l. 7, the Greek has, “The young man called on the gods,” *τοὺς θεοὺς*, where the Syriac reads God, in the singular. Lower down we find this incident of the Greek text omitted as useless, *ὡς δέ μοι καὶ ταύτας ἐμήνυσεν ὁ περιηγητὴ τῆς εἰκόνος*.*

The Syriac is beautifully printed, and as correct as can fairly be expected. I should, however, propose some alterations, e.g. p. 30, l. 4, *es̄hi kofo* for *lo shi kofo*; p. 30, l. 17, *Estilpon* for *Estipon*; p. 32, l. 20, *m'shalet* for *m'shatel*; p. 35, l. 10, *sagliē* for *saghē*; p. 49, l. 3, *Qoulossaicon*, with the Greek, for *Qoulossaioun*; p. 53, l. 16, *neb'har* for *neb'ar*; p. 82, l. 10, *mesh'taktion* *mesh'tahein* for *mesh'tidion* *mesh'taein*. I do not think, with Dr. Sachau and M. Renan, that Theodore, metropolitan of Merou, is the person to whom Sarghis of Rish'aïn addressed his treatise on Astrology, but space compels me to reserve my reasons for differing from these eminent scholars.

These remarks, far from attenuating the merit of the *Inedita Syriaca*, prove on the contrary that I have read the book with care, and found it interesting, and I am persuaded that the same interest will be shared by all who have the

courage to approach a Syriac text, often difficult, without the aid of a translation. The style however is pure and elegant, and belongs to the best epoch of Syrian literature. Some slight palaeographical indications preserved in the printed text seem to reveal a Nestorian rather than a Jacobite or Melchite origin. But we refrain from expressing an opinion on this point, as well as from offering a conjecture as to the author.

The appendices contain several other fragments of translation or original works, the principal of which will raise one corner of the veil which still hangs over the eminently Oriental and Assyrian science of Astrology. We have only to add that lexicographers will find in the *Inedita* an abundant harvest of new words or meanings, and that grammarians will meet with certain forms noticed as frequent in neo-Syriac, e.g. p. 3, i. 9, *Azil leh*; p. 18, l. 15, *Azil li*. Once more we congratulate Dr. Sachau on his valuable publication.

P. MARTIN.

W. Dindorf's Greek Dramatists and Lexicon on Sophocles. [*Poetarum Scenicorum Graecorum, Aeschyli Sophoclis Euripidis et Aristophanis fabulae superstites et perditarum fragmenta. Ex re-censione Guilelmi Dindorffii. Editio quinta correctior.* Lipsiae : Teubner, 1869.—*Lexicon Sophocleum.* Edidit Guilelmus Dindorffius. Lipsiae : Teubner, 1870.]

PROFESSOR W. DINDORF'S edition of the Greek dramatists is almost too well known to require much recommendation, even if the work were not so completely changed and improved in its fifth edition as it actually is. The first edition, published in 1830 by Messrs. Black and Young, contained a very unpretentious text of the four dramatic poets, with a very brief collection of the fragments. A second edition, considerably revised and augmented, appeared at Oxford, 1851, and the so-called third and fourth editions subsequently published by Messrs. J. H. Parker and Co. are no more than repetitions of the second, without any further improvements or additions by the editor. It is, however, for this reason that the new Leipzig edition (which is to all intents and purposes quite a new work) appears under the title of *editio quinta*. It is necessary to inform English purchasers that the new Leipzig edition is so much superior to the Oxford editions (be they styled *tertia, quarta, or even quinta*) as to render it a perfect waste of money to buy a mere reprint of a work now given up and superseded by the editor himself.

The difference between the two works is easily perceived. In the new edition the text of the dramatists is very carefully revised, and almost every page attests the accuracy with which the editor has availed himself of the numerous editions, emendations, and commentaries published since 1851. In Aeschylus we find frequent mention of Heimsöth and Weil, and many of their readings appear now in the text; in Sophocles, Nauck, Linwood, and Blaydes are quoted, and even among the innumerable conjectures of the latter, Prof. Dindorf has succeeded in picking out some of genuine excellence; in Euripides, Hirzel's investigations on the anti-thetic composition of the *diverbia* are carefully made use of, and Badham's, Paley's, Weil's, and Nauck's editions are often quoted. Those who have an idea of the great multitude of conjectures annually proposed on Sophocles and Euripides alone, both in philological journals and separate treatises, will be surprised to see with what perseverance the editor has pursued his subjects, and will thank him for selecting valuable emendations out of the chaotic mass of rubbish with which this kind of literature is sadly overlaid. We advise the possessors of Nauck's edition of Sophocles (in the Weidmann series) to compare his so-called critical notes with Dindorf's commentary, and we trust that they

will not fail to admire the unerring tact with which our editor discriminates the grain from the chaff.

Professor Dindorf's own criticism is, on the whole, as conservative as we believe that his nature and learning will ever allow it to be. A man who has edited and re-edited the Greek dramatists so many times during the last fifty years may be supposed finally to acquire a very great familiarity with them, which may embolden him to venture sometimes on re-writing rather than emending them in very difficult passages. Such readings as λίξω, Aesch. *Agam.* 14, and γυναῖκες Πλαι μηδὲ ἀνεμένες εἴν, Soph. *Ant.* 579, may be in the spirit of the poet, nor are they to be condemned as mere intuitive guesses at the original reading of the text, but in the present state of our MSS. emendations of this kind can scarcely be admitted as *sound* criticism. We are, however, glad to find that the editor generally restrains this ingenious bent with all his usual soberness of mind, except in the choral parts of Aeschylus, and there we may as well admit that in ever so many places sober-minded criticism ends and guesswork begins.

The critical apparatus is considerably simplified by the important discovery (which is to a great extent Dindorf's) that in Aeschylus and Sophocles we should only follow the Medicean MS., whose readings we find here, as far as they appear to influence the criticism of the text. In Euripides the MSS. are neither so good nor so easily valued and classified, but in Aristophanes we depend on two good MSS., the Ravenna and Venetian.

In the Prolegomena the editor treats of the metres and the prosody of his poets—a part of the work especially useful to the student. We should also add that the fragments appear in the new edition in far greater completeness than in the English editions of 1851.

In his preface Prof. Dindorf promises to publish annual supplements to his critical notes in Fleckeisen's *Jahrbücher*. It would be desirable to issue these supplements separately so as to enable the purchasers of the present work to follow the development of the criticism of their authors. Another promise made in the preface has already been partly fulfilled by the editor. The indefatigable firm of Messrs. Teubner are going to publish a series of lexicons in connection with the new edition of Dindorf's *Poetae Scenici*, in which Dindorf's text will be used as basis, though these lexicons will also contain original emendations caused by renewed consideration of the readings of the MSS. and grammarians. The *Lexicon Sophocleum* has already made its appearance, and a *Lexicon Aeschyleum* is, we are told, in active progress. The *Lexicon Euripideum* will be by a number of young scholars, though we believe that the general arrangement and direction are entrusted to a gentleman well-known among his friends as a most careful student of Euripides. The readers of our journal may be aware that the *Lexicon Sophocleum* has caused a quarrel between the proprietors of Ellendt's well-known work and Professor Dindorf, and that the matter is likely to be tried by law. We cannot understand how the editor of the new lexicon can be deemed guilty of plagiarism in any sense, as his work is original *so far as the circumstances allow of originality*. Ellendt's book being a very careful, but somewhat awkward and tedious work, Prof. Dindorf has contrived to give more matter in less space. It is of course unavoidable that his quotations should, as a rule, agree with those of Ellendt; but first of all, his explanations and comments, as a rule, do not coincide with Ellendt; on the contrary, while Ellendt often wanders from his point, Dindorf is always concise and to the point, and in many instances illustrates his opinions with original matter. One of his chief merits consists in his Latin translations, which have generally appeared to us

to be the very best it was possible to give, while Ellendt's translations are mostly vague. We have not the slightest doubt that students of Sophocles will soon learn to prefer Dindorf's work to Ellendt's, and hope that the *Lexica Aeschylea, Euripidea, and Aristophanea* will not be delayed too long, as the fifth edition of Dindorf's dramatists and these lexicons together will form an invaluable work for the student of the Greek language in general, and of these poets in particular.

W. WAGNER.

Intelligence.

Anglo-Saxon Prose Texts.—Dr. Grein, the well-known editor of the *Bibliothek der Angelsächsischen Poesie*, has just put forth a prospectus for a new edition of all the Anglo-Saxon prose that has been hitherto printed, to be called *Bibliothek der Angelsächsischen Prosa*. He thinks that this will lay the foundation for a future new Anglo-Saxon dictionary. So extensive a scheme will of course occupy a great number of volumes. In the first volume, he proposes to reprint Thwaites's edition of the Heptateuch, that is to say, the Pentateuch together with the books of Joshua and Judges, as well as the Homily on Job. But it does not appear that he will include the Apocryphal Gospel of Nicodemus, which is to be found in Thwaites's volume. In his second volume, he proposes to reprint the translations of the Psalms, edited by Spelman and Stevenson; and, in his third volume, the prose paraphrase of Psalms i.-l., as edited by Thorpe, together with several smaller pieces, including Aelfric's Grammar. No further volumes are as yet announced. We may remark that the scheme is by no means satisfactory. A mere reprint of old editions in which all the mistakes and misreadings of editors are reproduced, with foot-notes containing conjectural emendations, is not a work to which we look forward with much anticipation of advancing the study of Anglo-Saxon or with much confidence. Many of the works ought to be completely re-edited from MSS. as yet unused or insufficiently used; and a great improvement of the texts might be made in some cases by careful collation. But if Dr. Grein is resolved to do no more than go over the old ground, the very least that ought to be done is to consult the MSS., and to remove editorial errors and misprints. Possibly, he relies upon his own knowledge to remove such mistakes, but this is not at all what we should wish. Much trouble and ingenuity are often expended in making "conjectural emendations," which might have been saved by mere reference to the original itself; and hence the whole scheme is a very disappointing one. Even a little verification of the texts would be better than none at all; and we strongly recommend Dr. Grein to consider this point before he proceeds to patch up his reprints by *guessing at* the whereabouts of the errors that have been committed.

Dr. E. Baehrens, a young German scholar already favourably known to philologists by several contributions to the *Rheinische Museum*, is at present engaged on a new edition of the *Pangyrici latini*, which is to appear in the *Bibliotheca Teubneriana*. As there are no old MSS. known of these authors, an editor is entirely reduced to the copies made in the fifteenth century. One of these is found among the Harleian MSS., No. 2480, and it would be desirable that it should be used in the new edition.

Professor Theodor Nöldeke, of Kiel, has accepted the appointment of professor of Oriental languages at the university of Strasburg.

Professor A. Kiessling, the well-known editor of Dionysius Halicarnassensis, is about to leave Hamburg, where he has been professor at the Johanneum for the last three years, having accepted a chair at the university of Greifswald, in the place of Professor W. Studemund, who is going to Strasburg.

Dr. E. Hiller, of Bonn, is about to publish a new collection of the fragments of Eratosthenes.

M. E. Legrand and M. Gidel are to be the joint editors of a recently discovered mediaeval Greek poem in about 600 trochaic lines, to which five political lines are prefixed. M. Legrand has also discovered a second MS. of the poems of Sachlikis, which represents quite a different text from the Paris MS. The MS. bears the subscription ἐπειεισθη δέ Ζαχκλικής (sic) διά χειρὸς ἐμοῦ φρά Νοὲλ δέ λα Μπρώ ἐκ τῆς Τοδῶν καβαλλάρης.

The premature death (Feb. 24) of Dr. M. A. Levy, professor at Breslau University, will leave a gap difficult to supply in the ranks of Semitic philologists. His rare talent for the decipherment of inscriptions is borne witness to by numerous dissertations, among which we need only mention *Die palmyrenischen Inschriften, Phönizische Studien, Phönizisches Wörterbuch, and Siegel und Gemmen mit aramäischen, phönizischen u. s. w. Inschriften*.

IN MEMORIAM.

By the death of THEODOR GOLDSTÜCKER, at the early age of fifty-one, Philology has lost one of its greatest scholars, and Society, what it can still less afford to lose, one of the noblest and most disinterested of men. The pupil successively of Peter von Bohlen, Lassen, Schlegel, and Eugène Burnouf, the collaborator in the particular matter of Hindu philosophy, of Humboldt in the *Cosmos*, Goldstücker came over to England after the reaction of 1848-9, for the purpose of assisting Professor Wilson in the preparation of a new edition of his Sanskrit dictionary. For this new edition no material whatever existed save the dictionary itself in its printed form. Goldstücker, nevertheless, undertook its revision single-handed; and the immense proportions which under his hand the first six parts assumed (480 pp. without getting to the end of the first letter) rendered the completion of the work by one man or in one generation impossible. Many thousands of notes and references, for this and other works, the result of an unremitting study of the MSS. treasures at the India House, &c. are left behind; and we are glad to be able to state with certainty that the report in some of the newspapers that the deceased had left directions in his will for their destruction is without foundation. Nothing however will be published without the authorisation of Professor Cowell, of Cambridge.

It is well known that Goldstücker had compiled a comprehensive index to the principal grammatical works connected with Pāṇini, as well as a complete index of Kālidāsa's works, the publication of which might help to solve not a few philological problems. His knowledge of the Sanskrit grammarians, especially of Pāṇini, was and will probably ever remain unrivalled. His views on Pāṇini are expressed in the preface to his facsimile edition of the *Mānava-kalpa-sūtra* (1861): see also *Academy*, vol. i. p. 269. For the last two years he has been engaged in carrying through the press, for the Indian government, a photo-lithographic edition of the *Aśākhaśāstra*, of which 300 pages still remain to be done. By his decease, what may be called the "traditional" school of Vedic criticism, which gives to the interpretations of native tradition the preference over those derived from comparative philology, ceases to have a European representative. His manuscript of a Sanskrit grammar has long been finished; and it is hoped that this work, which is likely to revolutionise the teaching of Sanskrit in many respects, may be allowed to see the light. The great psychological value as an educational instrument which he attached to the Sanskrit language, if properly taught, was well known to his friends; and it was through his advocacy that a committee of the professors of University College, London, was appointed to report on the desirableness of making Sanskrit an integral part of all the degree examinations in the university of London.

Of the philosophical literature of India, the *Mīmāṃsā*, from its close connection with grammatical researches, engaged his chief attention; some fruit of his labours in this field is a nearly finished edition, prepared for the Sanskrit Society, of Mādhaba's *Jaimintya-nyāya-māla-vistara* (1865).

It was however Goldstücker's thorough familiarity with the legal and ceremonial literature of the Hindus which rendered his advice of so much value to the Indian government. A paper recently published by him, *On the Deficiencies in the Present Administration of Hindu Law* (Trübner, 1871), contains an exposure of the frequent failures of justice arising from the misunderstandings of native codes, which disgrace our Indian administration.

Besides some papers in the *Reader* and the *Athenaeum*, Goldstücker contributed an excellent essay on the *Mahābhārata* to the *Westminster Review* in April 1868; and among his papers will be found a copy of the great Eastern epic collated with the best European MSS. His library is, we are glad to hear, to be kept together.

New Publications.

- MORRIS, R. Historical Outlines of English Accidence. Macmillan.
 SCHOTT, W. Altajische Studien od. Untersuchungen auf dem Gebiete der tatar. [turan.] Sprachen. Heft 5. Berlin: Dümmler.
 THOMAS, E. Comments on Recent Pehlvi Decipherments. With an Incidental Sketch of the Derivation of Aryan Alphabets, &c. Trübner.

ERRATA IN NO. 43.

- Page 95 (b), line 2, for "second" read "sacred."
 95 (b), line 41, for "Leslie" read "Lister."

THE ACADEMY.

"INTER SILVAS ACADEMI QUAMERE VERUM."

Vol. III.—No. 45.

Readers are reminded that the mention of New Books, Articles, &c., in our lists is intended as a guarantee of their importance. The Editor of THE ACADEMY cannot undertake to return communications which are not asked for. The next number will be published on Monday, April 15, and Advertisements should be sent in by April 10.

General Literature.

Encyclopedie Dantesca. Di Gius. Jacopo Prof. Ferrazzi. Vol. IV.: *Bibliografia.* Bassano : 1871.
Bibliographia Dantea ab anno 1865 inchoata. Edidit Julius Petzholdt. Dresdae : 1872.

THE volume now issued by Professor Ferrazzi is the conclusion of an immense labour undertaken by an estimable Italian scholar for the glory of the national demi-god. The first volume appeared in 1865, the year of the Dante Centenary, and contained a phraseology of his *Divine Comedy* and lyrics, as well as of Petrarcha, and the great works of Ariosto and Tasso. Here the various passages from the several authors are arranged under appropriate headings, according to subject-matter. The second volume comprised a vast fund of miscellaneous matter, such as a chronological summary of the life of Dante, and of events more or less directly connected with it; Dante's politics, philosophy, cosmology, metaphysics, theology, &c.; his commentators and translators, and the bibliography of his works in various languages. The third volume gave numerous axiomatic or proverbial sentences, and similes, from the *Divine Comedy*, a list of the principal personages named in that poem, and various other particulars; also a considerable body of analogous details regarding Petrarcha, Ariosto, and Tasso. The newly published volume iv. aims less to open up entirely fresh lines of investigation respecting Dante than to fill gaps perceptible in the previous issues, and amplify information there proffered. We find here such headings as biographical studies of Dante; poetical compositions in his honour; his religion and catholicism, and knowledge of divers kinds; an itinerary of the *Divine Comedy*; works of art relating to Dante and his poems; legends and visions with which the *Divine Comedy* has some apparent connection; Virgil according to the conceptions of the middle ages; variations and other textual studies (a very serviceable compendium); the chief editions, comments, and translations, of all Dante's works; and much other miscellaneous matter.

Allighieri has in all ages found readers and commentators with no lack of ingenuity—rather, possessed of even a morbid ingenuity in the research and solution of difficulties: they might now apply this faculty to a new problem—namely, whether there is a single matter closely or remotely connected with their poet that is not, in some way or other, touched upon by Professor Ferrazzi. In fact, the reader who has once become expert in the scheme and arrangement of the book has before him a perfect mine of information. In many instances he will find a detailed answer to any enquiry which may have suggested itself to his mind; in others, he will at least be referred to available sources whereat he may drink deeper of Dantesque lore. To take a single small example:—We have just written the poet's

VOL. III.—NO. 45.

family-name as "Allighieri." The reader may study the much mooted question of the spelling of this name, by aid of a number of authorities cited by Professor Ferrazzi. The Professor himself is in favour of "Alighieri;" the present representative of the line, I observe, Pietro Serego-Alighieri, uses the double *I*.

Here is a note of some singularly interesting documents that were brought together in the great Dante Exhibition of 1865:—

"1. Register of Matriculations in the Guild of Physicians and Druggists, wherein is found written the name of Dante Alighieri. 2. Book of Deliberations of the Councils of the Capitidini and the Hundred; where are found registered certain opinions expressed by Alighieri. 3. Book of Sentences, commonly named the 'Nail,' in which are registered the two sentences that Cante de' Gabrielli of Gubbio, podesta of Florence, pronounced against Dante on the 27th January and 10th March 1302. 4. The Minute of the 12th August 1373, whereby Giovanni Boccaccio is commissioned to read the *Divine Comedy* in public. 5. Minute of the Council of the Eighty, in the Commune of Florence, of the 8th June 1485, ratifying the demand of Messer Dante Alighieri, grandson of the divine poet, to be relieved from any exile, and allowed to return to the country, 'considering . . . that it is well to show some gratitude to the posterity of that poet who is so great a distinction to this city.' 6. The Florentine Academy to Leo X. Having heretofore petitioned him that the bones of Dante might be brought from Ravenna to Florence, they thank him for assenting, and for the favours whereby they can further promote the study of arts and letters, and especially poetry, in virtue of the public expounding of the *Divine Comedy*. Many Academicians subscribe, among whom is Buonarroti, who signs thus: 'I, Michelagnolo, sculptor, make the same petition to your Holiness, proffering myself to the divine poet, to construct his sepulchre, appropriate, and in an honourable site in this city.'"

Another document, published by Signor G. Milanesi, dated 28th April 1301, deputes "Dante de Allagheris" to see the Via di San Procolo and the Via dell'Agnolo widened and straightened, and the obstructive house of Ruta d'Allerone pulled down. A less authentic record of the poet is the drama of *Dante*, by Ignaz Kollmann, published in 1826, and said to be now extremely rare. We here find Allighieri banishing the chiefs of both factions; his wife Gemma presumptuously chafing at his moderate and patriotic policy; her brother, Corso Donati, in love with Beatrice, poisoning her father, and eventually herself, and calling the alien Valois into Florence; Beatrice, on her deathbed, signifying to Dante, now in exile, the theme of the *Divine Comedy*. There is also a humorous incident of a German newly arrived in Florence, who, being pounced upon by a Florentine "White," and summoned to join that faction, knocks his interlocutor down, taking him for a madman; a "Black," observing this, jumps to the conclusion that the German must be a "Black," and he also is felled to the earth on like cause shown. Dante then has to adjudicate upon the case of this bellicose man of peace, and dismisses him scathless.

Professor Ferrazzi has no doubt a wide and minute acquaintance with the works of Dante, and the matters of scholarship more directly relating to those works and to the poet himself. Outside of this immediate circle, however, there is a great deal requiring to be done in a work of so comprehensive and encyclopaedic a character as that to which the Professor has vigorously addressed himself; and, to make the work finally complete and satisfactory, he should, I think, commit certain sub-sections to the care of sub-editors. For instance, the details of English books, &c.

are left in a sad state. An Italian scholar printing his vast aggregation of particulars in Bassano cannot be expected to get these things right : but *some one* ought to do so. A "Baronet" is not the same thing as a "Baronella" (p. 329); and I never heard of Mr. Morris Moore's being an American. The titles of English books are a thing to wonder at in many instances : perhaps the following is the worst example of all (I transcribe *literatum*): "MILTON JHONSON.—Paradise, Lost Post, in 8^o. Cloth. 55 (Ball. 1863)." This entry appears among "English Translations" of Dante, the assumption, no doubt, being that one "Jhonson Milton" has translated Dante's *Paradiso*. Need I say that no such translation exists? and that this fearfully mauled title can only represent the *Paradise Lost*, a sufficiently well-known original poem written by John Milton? Professor Ferrazzi was evidently himself embarrassed by this entry ; for he adds to the title, as cited above, "Thus notified by Carpellini." Here follows another mistake; for which indeed the Professor is in no wise responsible, but which yet would not have passed muster in his pages without some word of protest, had the sub-section of fine art been separately and cautiously supervised. In the Dante Exhibition already mentioned appeared a "portrait of Messer Folco Portinari," which some daring enthusiast or excited proprietor attributed to "John van Eack [should be Eyck] of Bruges." It is of course grossly improbable that any portrait of Folco Portinari exists or ever was painted ; and that an artist born and residing in Flanders should have painted it is practically beyond the pale of debate. But van Eyck, of all men in the world! when Folco died in 1289, and van Eyck was born in 1370!

To leave minutiae, however, I must heartily congratulate Professor Ferrazzi—and, as an individual student of Dante, thank him—in view of the completeness of this onerous and most creditable undertaking. A second edition should be forthcoming at no distant date: details can then be rectified, and the arrangement of the whole work systematized—in especial, incorporating the new vol. iv. according to the proper sequence of its items in vols. ii. and iii. The accomplished Professor has done his patriotic work in the best spirit, and to a truly useful result.

The second of the two Dante publications named in my heading is of a much more restricted scope. It only gives that section of Dantean bibliography which has accrued since 1865 inclusive, the year of the centenary. The vast area over which Professor Ferrazzi has had to range may be approximately suggested by noting that the poor seven years of bibliography recorded by Herr Petzholdt fill no less than 67 pages, and this although he (unlike the Italian adept) hardly ever gives anything beyond the bare words of title, and other such catalogue items. If we reckon eight books to a page (which seems rather below the mark than above), we find 536 separate works named by Herr Petzholdt in his sightly and careful brochure. Ten more pages are filled to advantage with a list of the works of art, almost entirely by German artists, collected in the Dresden Library by that eminent Dantophilist the King of Saxony—to whom, under his pseudonym of Philalethes, this pamphlet is dedicated.

W. M. ROSSETTI.

Le Testament d'un Latin. Par Louis Rambaud. Paris : Charpentier ; London : Williams and Norgate.

MEA CULPA is not always a sincere ejaculation ; men are found to cry, "miserable sinners," when no other way of glorifying themselves is at hand, and then of course they seek to startle by the enormity of their confessions.

Is M. Rambaud in earnest, or is the tone of unmixed

depression in which he speaks of the future of his race only another form of *forfanterie*? Either way, we trust there are not many like him ; for to say plainly that you despair of your country is a very different thing from being severe upon her faults.

And M. Rambaud is worse than a pessimist : he is a fatalist to boot ; he believes in the inherent fitness of some races and the unfitness of others for that liberty which alone (he says) can keep a people permanently alive. This fitness depends on the possession of "three talents, those of dignity, responsibility, and solidarity . . . and a talent—*une faculté ne se donne pas.*" Now some of us will demur to the assumption that the Latin race has no real sense of that "solidarity" about which its mouthpieces are so fluent ; and those who have lived in France will generally admit that in "dignity"—respect for himself and for the rights of others—the humbler Frenchman is on the whole above his English or German brother. But M. Rambaud, Latin to the backbone, must start with assumed principles ; and if facts interfere with his deductions—we know the proverb. For instance, to say that "France submitted so long to the empire because the principle of association cannot work among the Latin race" is to say something which requires proof ; but to prove it by asserting that *trades' unions* do not flourish in Wales is to ignore a movement which has just now almost disorganized the coal-trade throughout a large part of the United Kingdom.

Still M. Rambaud is well worth reading : for "physics and politics" will always be a taking study—chiefly perhaps because of the "unknown factor" which meets us in every calculation of the causes why Frenchmen are Frenchmen, and Germans Germans. Nothing in history is stranger than the difference between the way in which the Americans went on without a hitch when their president was struck down and the servile waiting upon one man's health and temper which for years characterized what we suppose must be called French policy.

And this weakness is of old date : M. Rambaud traces it through the whole sad tale of the *parlements*, their petty revolts and easy submissions. Once, in 1356, under Marcel, the states-general seemed about to make a stand and to force the king to take a privy council into partnership with him ; but (in M. Morin's words : *la France au moyen âge*) the attempt *avorta dououreusement*; Marcel was beguiled by the dauphin's promises, and the chance was lost of anticipating our constitutional arrangements. Mediaeval France was as fond as we were of representative government ; whence then the rapid change on which Mr. Froude delights to expatiate, and the difference between the free sturdy Englishman and the slavish Frenchman as they are drawn by Sir John Fortescue?

"It is all race," says M. Rambaud ; and his only hope is in an infusion of new blood, though he believes that "jamais la grande vierge saxonne n'épouera les noirs petits capitaines latins." But there have been successive infusions—one of the strongest when orthodox Franks came down to fill up the gap left by those ultra Latins the Albigenses. And France (says our author) owes all her worry and her profitless civil wars to her lack of homogeneity ; she cannot go quietly to decay like a people of pure Latin race, and the Germanic element is not strong enough to bring lasting liberty out of her struggles. What an opportunity for Prince Bismarck to promote a fresh immigration !

This Latin blood, then, is answerable for everything—for the centralisation which makes provincials (as Heine said) like milestones that tell you at once how far you are from the capital ; for the system which gives one soldier and one civil servant for every twelve *citoyens actifs*, and which enables M. Renan to compare France now with the empire

under Diocletian, "the equality of civil rights consoling us for the want of anything like real political freedom;" it is even answerable for the decay of population compared with "the exuberant life which is filling the world with English colonies."

The only question with M. Rambaud is, will things go on thus to the bitter end? Are these signs of death, or is it only a change passing over the nation? "In nations which have no capacity for freedom these are signs of more than change: such nations have nothing to give instead of that individuality which is the safeguard of the race, and with which modern life is always at war. They may last a long time: a tree goes on for years after it is really dead at the heart; *il n'y a rien qui vive si longtemps qu'un peuple mort.*"

It is a new thing for a Frenchman to take the title "second empire" as more than a sobriquet, and to tell his countrymen that he is sadly afraid they have begun that life in death which the case of Byzantium shows may last for many centuries. France is in a sad plight; but so she has been before. Even the national morals are not lower than they were in the days of Henri III.; and as for drawing comparisons between a French lad, "à qui manque la vie et qui épouse le peu qui lui en reste à satisfaire ses passions de vieillard" (p. 253), and a *lourd colosse anglais* drawn after the pattern of one of *Punch's* Midland colliers, let M. Rambaud go into Touraine and Anjou, instead of taking his types from the Paris streets, and he will find that man for man the peasantry there are finer fellows than those in many English counties.

Fatalism works in two ways: it may lead to desperation and that "wretchedness" of which the Church article speaks; it may foster that energy which has made the Scotch successful all the world over. If you believe yourself predestined to great things, your faith will most likely be helpful; but if you are convinced that you belong to a rotting race, there is not much hope for you. Whatever you set about, you will think that you start heavily handicapped, and your running will be weak in consequence.

If Frenchmen come to feel as M. Rambaud does, what are they to do? Creative power in art (most manifest, as he truly says, in times of upheaval) he denies them; even taste they will lose, if the wretched works which have been set up as models under the late empire do not show that they have already lost it. Their art and their literature are condemned to be Hindoo or even Chinese.

This is a bad state for the home of ideas to fall into—a strange contrast to that glorious future which the ex-emperor foresaw for the Latin races when he supported the Jecker claims. Even we, with our "Celtic element," and America with its strong Irish leaven, had better beware—unless indeed Mr. Huxley is right, and Celt and Saxon are at bottom the same; in which case we may say that it is the Basque and not the Gaul which makes France too "Latin" in its characteristics.

With all his assumptions M. Rambaud is suggestive and (as we said) worth reading: his quotations, above all, are valuable; it is well to be reminded (from M. Laboulaye) that the Spanish republics find the constitution of the United States a shirf of Nessus which destroys them; and this from Châteaubriand, "on affirme que dans cette civilisation à naître l'espèce s'agrandira; n'est-il pas à craindre que l'individu ne diminue?" is an unexpected parallel to a well-known line of Mr. Tennyson.

H. S. FAGAN.

LITERARY NOTES.

In the *Révue des deux Mondes* (March 15) M. Renan begins to summarise the researches of MM. Boutaric and Natalis de

Wailly on another of Philip the Fair's ministers, Guillaume de Nogaret. This first part includes the affair of Anagni and the election of Benedict XI. M. Renan calls attention to the astuteness with which Nogaret makes his report of his negotiations with Boniface in 1300 justify or extenuate the later act of violence; and he points out that Philip's victory over the papacy depended not so much on the daring *coup de main*, which failed, but on the death of Boniface and the pacific intentions of Benedict, which left it apparently unresented and certainly unpunished.

The *Cazzetta uffiziale* (March 18) abridges from an unpublished MS. in the Casanatian library some letters to Cardinal Rinaldo da Este, written by G. B. Niccolosi, a Sicilian, giving a description of his journey from Milan to Baden in 1645. His observations and his jokes are strangely like those of tourists of the present day, though the latter are not always intelligible. He proposes that *Via Mala* should be called *Via Pessima*; he describes the inhabitants of the Grisons as all "playing the Cato, the Fabius, the Marcellus in slippers;" and by mentioning that the ruined castles on inaccessible heights above the Rhine were said to have been erected by "tyrants of the country" in the time of "the ancient Romans," he gives a curious measure of the extent and longevity of quite untrustworthy traditions; for Italian *vetturini* of the present day are in the habit of giving just the same account of local strongholds, confusing most probably a real memory of small mediaeval tyrants with a hearsay belief in the omnipresence of the "antichi Romani."

The *Nation* (March 7) quotes from *La Fleur des Chansons amoureuses* (Rouen, 1600?) a poem "which is either the original or the translation" of the pretty Elizabethan song, beginning "While that the sun with his beams hot," given as xli. in Mr. Palgrave's *Golden Treasury*. There are two verses more in the French than the English, but the refrain is one line instead of three.

The publisher of the University of Glasgow, Mr. Maclehose, has forwarded us a poem entitled *Olrig Grange*, which seems worth noticing because it is a work of very considerable and at the same time most uncertain promise. The characters remind us of Mr. Oliphant's *Piccadilly*. The story is worked out rather too much in the manner of Mr. Browning, but it is conceived with quite uncommon power of kindly discrimination and insight; and this is the promise; but it is at bottom a poor hackneyed old story, and this the writer does not seem to see. The situation of Lockley Hall supplies a text for admirable declamation, but when it comes to be developed, the hero is always a poor creature wearing himself out in a vulgar struggle with vulgarity. The pious self-pity of the worldly mother and the despair of the worldly daughter, which is less unreal for being theatrical, are really brilliantly put. But the light by which the author sees and shows them, though it is kindled from within, will only go on shining if it is shone upon; it will soon burn itself out if only used to illuminate brilliant "glimpses of the obvious." The author, if he works out the satirical side of his book, may become a popular novelist; if he works out the ideal side, or the side he means to be ideal, he may inherit the mantle of A. K. H. B.; if he rises altogether above *Olrig Grange*, he has force enough to be a real poet.

The mysterious story of Kaspar Hauser, the wild boy, is nearly forgotten in England; but a book lately published by Dr. Meyer to prove that his whole story was a fraudulent invention has awakened a lively controversy in the newspapers, in which the surviving partisans of Hauser or their descendants endeavour—not to explain the mystery—but to show that there really was a mystery to explain. Unfortunately all the contemporary investigations into the case were conducted with incredible carelessness and disregard of the rules of evidence; and though Professor Daumer promises fresh facts in favour of the sincerity of Lord Stanhope's *protégé*, his letter on the subject in the *Altg. Zeit.* (March 14) does not lead us to expect that they will be very important or conclusive.

We have to announce the death at Cracow of Count Prezdiecki, a considerable name in the history, archaeology, and literature of Poland. Born in 1814 in Podolia, he began life in the Russian diplomatic service. As a youth he had travelled throughout Europe, and in 1845 published a couple of volumes of travels in Sweden, and a series of historical and picturesque sketches in Podolia, Volhynia, and Ukraine. A large fortune enabled him to play Mecenas to Polish history : and Theiner's *Monumenta Poloniae et Lithuaniae*, the last three volumes of Michael Wisniewski's *History of Polish Literature*, as well as the great edition of Dlugosz's works now in course of publication at Cracow, were supported by his liberality. Among his own books may be named—*Specimens of Mediaeval Art in Poland*, the *Domestic Life of Hedwiga and Jagellon*, the *Queens of the Jagellon Family*, &c. His death is a great loss.

The controversy as to the nationality of Copernicus has been lately resumed in an anonymous pamphlet published at Breslau. The arguments in support of the Polish claim to him are that he was born in a Polish town (Thorn) of a Cracow family, that his name and his best friends were Polish, and that, if he had been a German, he would not have studied as he did at the University of Cracow. Unfortunately for the discussion, Copernicus has left nothing behind him in any other language but Latin. An excellent edition of his works, with Polish translation by Bartoszewicz, has lately been published at Warsaw.

Art and Archaeology.

Grimm's Select Essays. [Zehn ausgewählte Essays zur Einführung in das Studium der modernen Kunst. Von Hermann Grimm.] Berlin : Dümmler's Verlag, 1871.

THE student of classic art finds himself in a deserted ruin, where out of mouldering fragments he strives to reconstruct a whole, to divine the life of the dead, to image forth their work, their age, and the character and succession of their different periods of production. But, if we turn to modern work, we are embarrassed by the very abundance of our materials. Letters, documents, biographies, are at hand, with which to piece out, complete, and interpret, the faults, the doubts, the problems suggested by the subject. Instead of resting on the shifting sands of hypothesis, and the uncertain bases of subjective impressions, we are able to make deductions from facts. Yet, after all, our mass of materials is but a mass of materials which no one has yet attempted to bring into shape and order. Every day the want of anything like systematic arrangement is more and more painfully felt. In the present volume of essays Dr. Grimm contributes something towards the commencement of the Herculean task, rather, indeed, by the spirit in which he writes than by actual fact of accomplishment.

Under the somewhat inappropriate title of "an introduction to the study of modern art" we have what is strictly speaking an introduction to the study of German work of the present day. We pass from Raphael and Michel Angelo to Carlo Saraceni, who becomes the text for an essay on the decadence ; Albrecht Dürer typifies the great movement of the sixteenth century in Germany ; a chapter on Goethe's relations to the arts seizes the critical moment when German art became again an expression of national life ; Carstens brings us to Cornelius and Schinkel ; and the closing paper discusses the fresh impetus given in a wholly new direction by the national art museums which are now springing up over the whole of Europe. These essays are really completely independent of each other, and were produced at very different periods of time. They are now put before us without any attempt having been made to give them a connected literary form, and it is only because of the tone common to them all that we are enabled to treat them as a

whole. In the opening paper, an address to the Venus of Milo, the key-note of the book is struck—

" Bewunderung und Staunen erweckt sie, die Phantasie trägt uns mit Macht zurück zu ihren Zeiten, aber fremd bleibt sie uns dennoch, und während wir im Anschauen verloren sind, sagt uns eine leise Stimme, es sei für uns kein Herz mehr in dieser Schönheit."

The product of a past age may say much to us, but it cannot have the full significance which attached to it in its own place and day. There is no such thing as cosmopolitan art. The charm of novelty is a legitimate charm. The age in which we live is the best for us. It is impossible for us to thrill with the emotions which quickened the pulse of past life. Therefore the art of our own time has power to move us when the work of the Past, however great, leaves us cold in the midst of our admiration.

" Orest und Oedipus, Iphigenie und Antigone, was haben sie gemein mit meinem Herzen ?"

The crowning beauty of that which is handed down to us from the Past is fled. The surroundings are gone, the people are no more who girt about the master and his work—that work in which he shadowed forth his secret, which was one and the same as the secret of his people and his day. So, for us, to-day, the day which is ours, is the best, and its art, however bad, better to us than any which has been before.

It will be evident from these passages that Dr. Grimm approaches the subject of art from the literary point of view. And this point of view, however full of value and interest, gives us only one side of the question, the side which is alone intelligible to the artistically uneducated mind. Form and content, the constituent elements of a work of art actually inseparable, are separable in idea. To the man trained in literature as to the public, the chief element of interest is content, a quantity ever varying in relation to the age. To the artist, the predominant interest is form. The brotherhood of art is no empty word ; each artist is a student of the same science, the science which gives form. The learner of to-day can stand in spirit without effort by the teacher of the Past. But he who enters on the study of art through the gate of literature has ever to create for himself by a mental process the conditions which complete the work under observation, before he can see its import. As a consequence he stands admiring, moved rather by cold and conscious pressure than because he has given himself over unreservedly to his impressions. The skilled musician, on the contrary, reads a sonata of Mozart's unchecked by reflections on the conditions of life in Austria when Mozart wrote ; and the Venus of Milo is to the artists of England as she was to the sculptors of Greece. And even when we speak strictly of the content—the "geistige Inhalt"—we must remember that works of the finest art develop generally some simple strain of passion, eternal in human nature, which, as such, speaks straight to the heart of all time in spite of unaccustomed mode of manifestation. It is only after having made these limitations that we can give a qualified assent to Dr. Grimm's proposition—"the art of the day is the best for the day." It is, indeed, the outcome of the day's striving, fashioned of the thoughts common to us all. Doubtless to the German, Potsdam is more lovely than the Parthenon ; the frescoes of the Ludwigskirche surpass the hand of Raphael in the Vatican ; and Frederick, brave in the Berlin square, breathes a holier inspiration than the god-born sorrow of Niobe.

Yet, out of what may seem to some onesidedness and defect, comes the special point and value of these essays. Dr. Grimm has confined himself to criticism and interpretation in that province in which he is a master. He does

not pretend to offer us here speculative theories, or aesthetic criticism for which he has no gift, but seizes on the relation of the artist to the thought and life of his time. And he has given us in every instance a suggestive and vivid picture, without affectation in thought or manner. In the paper on Michel Angelo and Raphael he has indicated the relative position of both by happy touches, which discriminate them not only as artists but as men. The grand figure of Michel Angelo is treated with a sympathy rare even in those ready to do him just honour, and the stress which is laid on the depths of tenderness and sensitiveness in his nature shows considerable power of insight into character. Wherever there is any falling short in judgment, it would seem to arise rather out of the influences of early association and training than from any defect of natural power. It appears, indeed, in the highest degree improbable that one who so warmly enjoys modern German work, and who can speak of the Cornelius movement in terms of such enthusiastic admiration, should be able to bring to his task full appreciation of the qualities which are essential to a genuine work of art. If, however, certain signs are here noted which the English critic, in common with the non-German world, holds to be marks of imperfect or improperly trained perception, it is with much reserve of judgment, and with a strong desire to bring into full relief the valuable qualities of Dr. Grimm's book. No one who reads it will fail to see its freedom from pretension and phrase-making, or to be attracted by the way in which he sketches the leading lines of each age, the power with which he individualises each man, connects him with his time, and reads him in his work.

E. F. S. PATTISON.

ART NOTES.

A letter dated Berlin, end of February 1872, and signed Phil. Silvanus, appears in the present number of the *Zeitschrift für bildende Kunst*. It gives interesting particulars as to the relations now existing between the government and those art institutions which are under governmental control. Both the Academy of Arts and the Royal Museums have suffered severely under the Mühlen régime, and are hoping anxiously for a more liberal policy from his successor, Dr. Falk. Many posts have been allowed to remain vacant from motives of economy; the question now is by whom are they to be filled, and what is to be the programme of the future. Of old, there was a General-Director, to whom the directors of the separate galleries and cabinets were subordinate; the chief was always considered to fill a court office, and it was necessary that he should be *hof-fähig*. Since the voluntary resignation of Herr von Olfers, who obtained this appointment through the favour of the Queen Dowager, this post has remained unoccupied. It is now nominally held by the Crown Prince, Herr von Usedom being appointed at least for six months as his *Adlatus*. According to all report, Herr von Usedom is the right man for the place. But, it is asked, is the existence of such a place desirable? The General-Director has the supervision of a number of collections and galleries, which represent the most various departments of the arts. No man alive can possess in each special knowledge which would warrant him in trusting to his own judgment. He must therefore often (whoever he may be) rely on his subordinates if he wish to avoid making serious mistakes. On the other hand, it is urged with much show of reason that in the interests of the institutions themselves it is highly desirable that they should have a zealous and active representative who can make their wants known to government, and enforce the attentive consideration of their pecuniary and other needs.

The Burlington Club intend to hold an exhibition of pictures and drawings by Holbein in the house of the club, and to open the same at the end of April next. This exhibition will include pictures and drawings from Windsor Castle and other royal

palaces. At present there is a fine collection of drawings by Claude on view, together with Limoges enamels lent by Baron Rothschild and another member of the club.

The Academy at Düsseldorf has been destroyed by fire. The picture gallery and library have escaped.

Mr. George Burnett's choice collection of modern pictures, water-colour drawings, and a few pictures by old masters, was disposed of on Saturday, March 16, by Messrs. Christie and Manson. The drawing by T. M. W. Turner, R.A., of St. Agnes' Hill, engraved in the "England and Wales" series, fetched 350 guineas; his "Kelso Bridge," an exquisite drawing in miniature, 141 guineas; "Brienne," another drawing in miniature, engraved as an illustration to Sir Walter Scott's works, 150 guineas; "Whitehaven and a View on the Medway," a sketch in oils, 150 guineas. "The Spring of Life," by Mr. Frederick Walker, 101 guineas. Two fine paintings by J. Constable, R.A., "A View on the Stour, Canterbury," 475 guineas, and a cabinet picture, "The Opening of Waterloo Bridge," 315 guineas. The "Frank Encampment," by J. F. Lewis, R.A., 420 guineas. Three cabinet examples of Édouard Frère, 1021 guineas. "Dolores," by John Phillip, R.A., 900 guineas. The prices now given for works of recognised merit, both in England and abroad, have reached a point never before touched. On the Friday preceding the sale of Mr. Burnett's collection, a single plaque of Wedgwood ware, the "Nine Muses," by Flaxman, was sold for 100*l.*

Sir John Gilbert, who has just received the honour of knighthood on succeeding to the presidency of the Old Society of Painters in Water Colours, was born at Blackheath, Kent, in 1817. Although he is principally known to the public by his popular illustrations of popular works, he has throughout his career constantly painted both in oil and water colour, and exhibited at the Royal Academy, at the British Institution, and at the Gallery of British Artists. In 1852 he was elected an associate of the Old Water Colour Society, and he became a full member in the following year. He is now the president of the society, and has recently been elected an associate of the Royal Academy.

We hear that the paintings offered for exhibition in the Albert Hall, though equaling in number those sent in last year, have considerably deteriorated in quality.

The sale of the Pereire collection ended on the 9th of March. Examples of the French school in the eighteenth century came to the hammer on the 7th. A "Little Girl," by Greuze, went for 32,500 fr.; and Pater's "Plaisirs champêtres" fetched 19,200 fr. On the 8th and 9th came the Flemish and Dutch pictures. A "Female Portrait," Franz Hals, 21,000 fr.; Rembrandt's portrait of Justus Lipsius, 38,500 fr.; Rubens' "Apollo and Midas," 40,000 fr.; Jacob Ruysdael's "Le Château," 47,000 fr. The sum total realised by the sale was 1,785,586 fr.

M. Champfleury has been named successor to M. Riocreux, as head of the collections of the national manufactory of Sèvres. The death of M. Riocreux was announced in our last number.

The administration of the Louvre has just purchased the crayon portrait of Ingres which was engraved by Galamatta.

A superb specimen of eighteenth-century art was brought to the hammer on the 20th March, at the Hôtel Drouot. Amongst about a hundred fine Italian, French, and German medals, occurred the magnificent medallions of Louis XVI. and Marie Antoinette, executed in 1785 in hammered and chiselled silver by Lortior, the king's goldsmith. The copper gilt frame which surrounds them is also a gem in its way; it was the work of Gouthière, and is elaborately ornamented with the royal arms encircled by branches of lilies.

The rumour runs in Paris that Mlle. Rosa Bonheur is to be made a member of the Academy of Fine Arts. It is also said that the Royal Academy of London has in contemplation the admission amongst its number of the most distinguished English women artists. As respects the French Academy, it would be no innovation, but the revival of a custom which prevailed from its foundation up to the revolution of '89. Mme. Vigée Lebrun was the last woman academician.

Under the title "Chronologische Lijst der Ammans van Antwerpen," an extract has been reprinted from the *Annals of the Belgian Archaeological Academy*, which will be of interest to students of the school of Bruges. It is a notice by the late M. Torfs, with annotations by M. le Chevalier Léon de Burbure, on Jean van Eyck, commonly called van Eycke; Amman d'Anvers, in 1431–1437; and Jean van Eyck, the well-known painter, who are possibly one and the same person. The painter was, as is commonly known, *valet de chambre* to Philippe le Bon, and the Amman was probably the Jean van Eyck mentioned as *huissier* to the same prince. But it is worthy of remark that these two men whose names are precisely similar lived at the same time, at the same court, were both favourites of the Duke of Burgundy, and that the Amman is never mentioned after the death of the painter.

The direction of the Dresden Gallery bought, not long ago, as a Holbein, a painting in monochrome of the "Death of Virginia," signed with the monogram "HB." Herr Director J. Hübner has lately made public in the *Illustrirte Zeitung* a woodcut from the work in question. His statement that the monogram, which apparently referred to Hans Bock, disappeared in the process of cleaning incites us to wish for more minute particulars as to the process employed. It is possible to destroy even a genuine inscription.

Music.

The Oratorios of Carissimi. Edited by F. Chrysander. Volume the First; containing Latin Oratorios: *Jephite, Judicium Salomonis, Jonas, Baltazar.* [To be continued.]

THE life of Giacomo Carissimi was the most eventful, as well as one of the longest, recorded in musical biography. Greater changes in musical practice are included between the beginning and the end of his artistic career than of any other musician. Born about the year 1580, he might have seen Palestrina; living certainly till 1670—how much longer is uncertain—he might equally have seen Lully, J. Ambros Bach (the father of Johann Sebastian), and Purcell. He probably knew Stradella and Corelli, and he is said to have given some instructions to Alessandro Scarlatti; men, one and all, whose compositions differ from those of Palestrina as widely as the "perfected" Gothic of the fourteenth century differs from the Romane of the tenth, or—a closer analogy—as the English of Dryden from that of Chaucer. To attribute to Carissimi, as has sometimes been done, or to any single composer, the invention of what is now understood by "expression" in music is absurd. The works of his predecessors, "the old masters," abound in expression, "although," as Dr. Boyce has well put it, "not so particularly marked" as in those of the more modern. But to Carissimi may be fairly granted the merit of having, more than any other musician, contributed to the perfecting of modern tonality, without which this same "expression," so characteristic of modern music, would certainly have been unattainable. The works of this great musician, who lived nearly a century, and who would seem to have allowed no day to pass without a "bar," have, for the most part, remained hitherto in manuscript. Collections of them are to be met with in many libraries public and private; in the Bibliothèque Nationale, of Paris; in Christ Church, Oxford; even in the British Museum, so distinguished for

its deficiencies in music and musical literature; and in the collection made by the late Abbé Santini of Rome, now, I believe, dispersed—a collection, of inestimable value, which the trustees of the British Museum might have purchased a few years since for a few hundred pounds.

Among the works of Carissimi which have attained the greatest reputation—have been most frequently referred to, and from which extracts have been most frequently made—are his oratorios; a class of composition to which he would seem to have been led to devote his powers both by natural inclination and through association with the disciples of San Filippo Neri—the Oratorians. The earnest, though not of necessity sombre, tone suggested by the places and occasions for which these works were required, and the scope for varied musical expression which their quasi-dramatic structure afforded, must have been congenial to a disposition and a talent like those of Carissimi—the one enquiring, tentative, adventurous, the other fortified by the possession of all the learning of the learned age at the close of which he first saw the light. Of these oratorios, the volume before us—one of a set of *Denkmäler der Tonkunst*, to others of which, in their turns, I hope to be able to call attention—contains four, no one of which has, I believe, ever before been printed entire. In one of these, I have an especial interest. A MS. copy of *Jephite* came into my possession a good many years since, and the study of it so excited my admiration that I determined on the first possible opportunity to give a public performance of it. This I was enabled to do in the year 1850. Besides a chorus, "Plorate Filii Israel," which Händel has transferred bodily to his oratorio *Samson*—an act which renders praise of it superfluous—it contains others, one depicting the flight of the Ammonites, the other the joy of the Israelites after victory, which, though musically less interesting, are scenically much more so. But the glory and wonder of the work, without any reference to its date, are the recitatives and *arie parlanti*, which for "spanning" of "words with just note and accent" have never, and even for pure musical charm have seldom, been exceeded by the productions in the same kind of the greatest modern masters, favoured as they have been by more than two centuries of subsequent experiment. The reader who may suspect this praise to be extravagant has but to turn to the first scene between Jephtha and his daughter after his return from victory (pp. 17–20), or to the lament of the daughter, "Plorate, Colles!" which immediately follows, with its wailing echoes, and judge for himself.

The oratorio following *Jephite* in the present volume, *Judicium Salomonis*, is attributed by M. Fétis—he does not say why, or on what authority—to Cesti, one of the most distinguished of Carissimi's many distinguished pupils. From internal evidence I should certainly be inclined to attribute it to a somewhat, though not much, later hand, which might easily have been that of Cesti. The choruses are quite after the manner of his master; so also are the recitatives, though perhaps they are not quite up to the standard of Carissimi. But the work is full of *passages*, which indicate a condition of the vocal art mechanically in advance of any which Carissimi could have known till after he had quite formed his style—an advance involving the

"Wanton heed, and giddy cunning,
The melting voice through mazes running,"

which must have first struck the ear of Milton in his Italian travels, and which must have been novelties, even in the Land of Song, as late as the middle of the seventeenth century. The solo parts of the *Judicium Salomonis* abound in *fioriture*, and the solo of the true mother after her child has been restored to her, "Congratulamini mihi, Omnes,"

presents some difficulties even for the best trained modern vocalist.

Baltazar, which follows it, is a more extended work than *Salomon*. Its plan, too, is altogether different, and more after the manner adopted by Carissimi's German-born but Venetian-bred younger contemporary, Heinrich Schütz. The scenes are connected together by narrative, and the choruses, besides being more numerous, as the subject demanded, are more developed, and written for a larger choir. The great composer has naturally brought all his powers of musical expression to bear on the interpretation of the handwriting on the wall. Daniel intones the words he has to interpret on the same interval—a minor third—making each successive intonation of them a tone higher than the last. Even now, when this kind of sequence has been treated in every conceivable manner, and presented with every conceivable orchestral adjunct, this passage cannot fail profoundly to move the susceptible hearer. What must have been its effect two hundred and fifty years ago, when it was, if not absolutely new, in the highest degree uncommon and unexpected!

The fourth and last oratorio in this volume, to which we are promised a sequel, is *Jonas*, unquestionably the most varied and the most beautiful of the four. The recitatives are as interesting musically as they are appropriate to the characters to whom they are assigned and the situations which have suggested them. If the work contain no single piece of part-writing as closely knit—wherein the passages seem as inevitably to grow out of one another—as the “Plorate” of *Jephéte*, the closing “Peccavimus, Domine,” with its long overlapping phrases, its masculine suspensions, and its eight-part counterpoint—each part moving with the ease and freedom of an independent melody—approaches the “Plorate” very nearly; and proves that, if Carissimi was the first practitioner of a new and necessarily incomplete art, it was from choice, not necessity; and that he might have been equally the last, in point of time, of an old and complete one—*ultimus Romanorum*. In the choruses of a more dramatic character—which are for two choirs, and moreover have an independent orchestral accompaniment—Carissimi has exhibited powers of description and realisation which even a contemporary composer with a hundred models before him might envy. In one of these the terrors inspired by a storm at sea, and in another the confession of the repentant Ninevites, are depicted or expressed in accents not only true to nature, but of themselves beautiful and regular. Carissimi stands alone among musical reformers in having never forgotten that even expression *may* be attained at too great a sacrifice—that of the art through which it is achieved.

JOHN HULLAH.

NOTES ON MUSIC.

In his eighth annual concert, Mr. Walter Bache has again considerably added to his claims on our gratitude for the propagation of modern German and especially of Liszt's music in England. The programme almost exclusively consisted of compositions by this master, the *pièce de résistance*, “Les Préludes,” No. 3 of the *Poèmes symphoniques*, being repeated by desire. We have spoken about this work on a former occasion (see *Academy*, vol. ii. p. 282), and will add only that the applause of the audience seemed even more enthusiastic and genuine than last year, showing how the great beauties of the composition had gained by a repeated hearing. The principal new feature of this concert was another symphony by Liszt called *Festklänge* (“Sounds of Festivity”). Although an explanatory programme like Lamartine's words to the “Préludes” was not added to this piece, every hearer of moderate imagination could easily discern the fundamental scheme, passing through all the phases

of festive delight and enjoyment from the sacred strains of a religious ceremony to the merry rhythms of a dance at a village fair. In this high imaginative faculty consists the chief merit of the work, which otherwise seems to suffer somehow from the pompous noisiness of an occasional composition. Two charming songs without words for pianoforte by Liszt (the one a musical interpretation of one of Petrarch's sonnets), and likewise the *Polonaise brillante* by Weber, arranged for pianoforte and orchestra by Liszt, Mr. Bache rendered with all the delicacy of touch and technical skill which the modern treatment of his instrument requires. The latter work was conducted by Mr. Manns; other orchestral pieces by Mr. Bache.

The most interesting feature of the first Philharmonic concert was the first appearance in England of a German violinist, Herr Burgher, of Detmold, who, together with his master, Herr Joachim, played the concerto for two violins in B Minor by Spohr. It is in pieces for his own instrument that the considerable merits of this otherwise somewhat antiquated composer show to greatest advantage, and the rendering of the concerto by two of the most accomplished artists of his own school was a rare treat to the refined musical ear. Herr Burgher played besides with great success Tartini's *Trillo del Diavolo*.

Selected Article.

Die Künstler von Haarlem. Von W. Bode. Zeitschrift für bildende Kunst, March 8.

New Books.

CHURCH, R. W. Civilisation before and after Christianity. Macmillan. ESSAYS by the Author of “Vera.” Smith, Elder, and Co.

FABRE, M. A. Correspondance de Fléchier et de M^{me} Deshoulières et sa Fille. Didier.

JOHNSON, C. F. Lucretius on the Nature of Things, translated into English Verse, with Introduction and Notes. New York : De Witt, C. Lent, and Co.

LUCAS, Charles. Les Temples et Églises circulaires d'Angleterre. Paris : Thoriss, 1871.

MÉNARD, René. Histoire des Beaux-Arts. Art antique. Paris.

SCHUCHARDT, Christian, Director a. D. der grossherzoglichen Kunstsammlung zu Weimar. Lucas Cranach des Älteren Leben und Werke. III. Theil. Leipzig : F. H. Brockhaus, 1870.

SAINTE-BEUVE, C. A. Nouveaux Lundis. Tome 13^e. Paris : Michel Lévy Fr.

SAINTE-BEUVE, C. A. Souvenirs et Indiscrétions. Le Dîner du Vendredi. Publié par son dernier Secrétaire. Paris : Michel Lévy Fr.

Theology.

Short Explanation of the Acts of the Apostles. [Kurze Erklärung der Apostelgeschichte. Von Dr. W. M. L. de Wette. Vierte Auflage, bearbeitet und stark erweitert von Lic. Th. Fr. Overbeck, a. o. Professor in Basel.] Leipzig : Hirzel.

SEVERAL parts of de Wette's commentary on the New Testament have been issued since his death in a revised form, but this is the first time that an editor has been selected from the later school of critics. The difficulty of the task undertaken by Dr. Overbeck consisted not only in the large accumulation of materials within the last twenty years, but in the necessity of accommodating the work to the very view which de Wette himself controverted. The exposition of the Acts of the Apostles is rightly described by Dr. Overbeck as “the weakest portion of de Wette's *Handbook*.” The much praised brevity of the author degenerates here into a meagreness which generally leaves the reader helpless in the face of the numerous questions raised by recent criticism. De Wette was not an opponent of this criticism on principle; he was, in fact, its most useful pioneer; though the editor remarks with much justice, that “when the *Paulus* of Baur, and a little earlier the kindred work of Schneckenburger, came in his way, de Wette was no longer

of an age consistent with full receptiveness for such original works." Besides, the classical work on the Acts by Zeller, which developed and gave a more comprehensive justification to Baur's hypothesis, had not yet appeared. The editor had consequently to choose between substituting a new work of his own, and subjecting that of de Wette to a very thorough revision. He chose the latter, in accordance with the wishes of the publisher. The whole of the original commentary is preserved, but has received many additions and the necessary corrections from the editor. The only place where the fresh matter has entirely excluded the old is in the introductory sections, which are now almost entirely out of date. It cannot, however, be denied that the book has thus become rather difficult to use, and we hope the editor will take the next opportunity of making it altogether, as the larger half of it is already, the organ of his own views.

Dr. Overbeck's work is based on the researches of Baur and Zeller. It is even to some slight extent influenced by the writings of apologetic critics, for though the editor refutes their sophisms at length, he confesses that a "not inappreciable" though "not nearly the best" part of his critical opinions has been derived from the study of their works. But Dr. Overbeck has not stopped short with the results of Baur and Zeller. A number of questions, barely touched by his predecessors, have received either a solution or at least the first careful examination at his hands. It is remarkable that he should have found so much still requiring to be cleared up in the Pauline part of the book. In his theory, too, of the object of the Acts, he deviates materially from Baur and Zeller. Instead of viewing the book as an offer of peace from the Pauline to the Jewish-Christian party, he points out that it already occupies "the characteristic position of the ancient Church in general," and therefore cannot be the result of the simple opposition between the first Christian parties. Against Zeller's view in particular he objects, that it fails to solve the riddle, how the book can be on the one side so decidedly Gentile in its tendency, on the other so weak in its Paulinism (if we may be allowed the word). The view that it was designed for Jewish Christians is refuted by the *national* antagonism everywhere prominent, and forming so strong a contrast to its *dogmatic* Judaism. Under this head we are called upon to notice the prominence deliberately given to the unbelief of the Jews, the external separation of the Christians, and lastly the predominance of the Gentile-Christian element, which is constantly assumed in the Acts. The "political side" of the Acts is also discussed, that is, the endeavour of the writer to recommend Christianity in high quarters, by describing the good understanding between Paul and the Roman officials. On the other hand it is shown that the author has already given up the distinctive theology of Paul, and only clings to his universalism, without basing it on the Pauline conception of the law; that the step however was not taken as a concession to Jewish Christianity, but in consequence of Judaistic influences on Gentile Christianity, and the natural incapacity of the latter to understand the problems of the original Paulinism. The antitheses of the apostolic age have, according to Dr. Overbeck, already lost their original significance, while Gentile Christianity appears "as the legitimate fruit of the primitive apostolic Christianity, not as the original foundation of Paul breaking through the barriers of the primitive church." The latter is, in spite of his separation from his countrymen, described as equally faithful to the law with the elder apostles, and defended against the charge of having been the preacher of apostacy; but this, too, is not a deliberate concession to Jewish Christianity, but rests purely on the assumption that the legal obligation of Jewish Christians was universal in

the apostolic age, and was therefore recognised as such by Paul. On the other hand, the first mission to the Gentiles is carried back to the elder apostles, and the public appearance of Paul marks no fresh stage in the development of Christianity. Connected, according to Dr. Overbeck, with this veiling of original differences is the fact that the conflicts of Paul in the Acts are always with Jews, not Jewish Christians. Hence the book is described as the "attempt of a Gentile Christianity, itself strongly influenced by the early Christian Judaism, to explain its relation to the past, especially to its own origin and its founder Paul."

This point of view involves a material advance upon previous criticism, and one which leads of itself to an abatement of that character of interestedness which Baur and Zeller ascribed to the author. Dr. Overbeck, seems, however, not sufficiently to have considered that the parallel evolved between Peter and Paul, the inauguration of the Gentile missions ascribed to the former, and the punctual observance of the law to the latter, cannot be explained from ignorance of the apostolic age, but only from a conscious purpose. This is still more evident from another circumstance, namely, that the Pauline epistles with which the author was certainly well acquainted give an entirely different picture of the party-differences. But the existence of a conscious purpose implies that the Gentile Christianity represented in the Acts of the Apostles had still to struggle for its rights against the attacks of Judaisers, and though not amounting to a proposition of peace to the other side, the book is certainly an apology for Gentile Christianity and its founder in opposition to the attempt of Judaisers to exhibit it as a falling away from the primitive faith. This view of the book would find its complete justification if we could recognise more distinctly the record employed in the composition of the Petrine portion in particular, a record which was probably characterized by an opposition to Paul. Of course the intended apology was facilitated by the standing-point of the author, who, as Dr. Overbeck rightly shows, had no appreciation of the peculiar position of Paul, and saw in him not the apostle of the Gentiles, but, as also in Peter, an "universal apostle."

The editor has devoted particular care to the investigation of the historical sources of the Acts. In opposition to the earlier view, which regarded the speeches and letters as so many documents at the disposal of the writer, he lays stress partly on the peculiarities of style which pervade these as well as other parts of the book, and partly on the close connection between their contents and the general tendency of the work. He points out as the only historical source, for which there is any direct evidence, the narrative of a travelling companion of Paul, whom he supposes to be, not Timothy, but Luke. The passages derived from this source, in which Luke relates his own experiences, and shows that he is an eye-witness by his use of *ημεῖς* (the so-called *Wirkstücke*), relate chiefly to the journeys of the apostle, and especially those by sea. But Dr. Overbeck clearly shows that this was no mere itinerary or travelling diary, but a detailed description of the apostle's missionary labours, which is distinguished from the rest of the Acts by peculiarities of style and contents, and cannot have proceeded from the writer of that book. Its intermittent use is not to be accounted for by the presence or absence of the narrator, nor by his personal relation to the events, nor yet from the plan of the book. The passages taken from it are not even inserted without alteration, but are sometimes much abridged, and sometimes have to give place to descriptions in the tone of the rest of the Acts. Their source is alluded to at three critical points (xvi. 10, xx. 5, xxvii. 1), an allusion due to the evident wish of the compiler to be himself identified

with the companion of Paul. The commencement of the narrative is lost, as well as a great part of its original contents. As to the question (probably to be answered in the affirmative) whether the first missionary journey of Paul (ch. xiii. and xiv.) fell within its sphere, Dr. Overbeck expresses himself doubtfully (p. xlv, cp. p. lix); but he has taken all the more pains to determine, from xvi. 10 onwards, the sections borrowed from this narrative. These are, with some additions and other alterations, ch. xvi. 10-17, xx. 4-xxi. 16, xxvii. 1-xxxviii. 14; while in xxi. 17, &c., xxviii. 15, &c. the compiler is thought to have connected his own work with the preceding narrative, by expressions borrowed from the latter. This hypothesis, however, is arbitrary. The renewed mention of the arrival in Jerusalem in ch. xxi. 17, may be accounted for upon the supposition that the original text was only excerpted by the compiler; and the same explanation may be given of the ηλθομεν εις Πάμπη, repeated in xxviii. 16 from ver. 14. The hypothesis of Dr. Overbeck is refuted by the occurrence of the words στὸν ἡμῖν, xxi. 18, which it is too great a licence to remove from the original narrative. The sections xx. 17-38, 33-36, 43 (Βουλόμενος διασῶσαι τὸν Παῦλον), are regarded as the interpolations of the compiler; xxviii. 1-10, as an excerpt with additions by the latter. And these are not the only passages in which, according to Dr. Overbeck, the compiler is dependent on the same record. Not a few statements are borrowed from it in the account of Paul's journey in Greece (ch. xvii. and xviii.), though these are thoroughly worked up into an independent narrative. Of course many points of detail may be viewed differently. Dr. Overbeck, for instance, regards xxi. 10-14 as a later addition, partly on the ground of its close affinity to the spirit of the narrative, partly of the "indistinctness of the chronology." Yet the latter may be sufficiently accounted for, if we suppose the compiler in vv. 9 and 10 to be only excerpting a more detailed narrative, while the former is a proof, not that the notice of Agabus is a fiction, but only that the compiler selected and reproduced this scene from the original record. The only new feature is in xxi. 13; and by the removal of this, v. 14 appears in a closer connection with v. 12. It may be added that the same reasons which have induced Zeller and Overbeck to mark xxvii. 21-26, 33-36, as interpolations of the compiler, also apply to verse 31. Be this as it may, it is at any rate one of the editor's distinctive characteristics that he has investigated the relation of the record we have spoken of to the Acts of the Apostles in a more thorough manner than his predecessors, and has conclusively proved that they are by different authors. The only other parts which, in Dr. Overbeck's opinion, are probably derived from a written source (though the precise nature of this is uncertain), are the narratives relating to Peter, and the section viii. 9-24. These, too (as in the narratives of Pentecost, of Cornelius, and Simon Magus), have been largely modified by the compiler. The date of the composition is placed in the times of Trajan or Hadrian; at least the editor wishes "to keep open" the second and third decades of the second century; and the place selected for it is not Rome, but Ephesus.

The most material improvements in the commentary are to be found in the portion relative to the speeches. The theory of their entire or partial authenticity is subjected to a searching examination, and their connection both as a whole and in each of their parts with the peculiar plan of the book distinctly exhibited. See especially the analyses of Paul's speeches at Athens and Miletus, and his three speeches on his trial, together with the entire section in which the latter are imbedded: a masterly analysis, which supplements and develops the critical theory of the book in several essential points. We find also a new view, differing

from Baur's, of the speech of Stephen, and of the apostolic decree. According to Dr. Overbeck, Stephen was not really a precursor of Paul, and the apostolic decree was not a compromise offered to the contemporaries of the writer, but an attempt to account for the precepts relating to proselytes still enforced in the Gentile Christian circles, on the one hand, and for the legal strictness ascribed to Paul on the other. Dr. Overbeck, however, opposes the view that these precepts were observed in the Pauline churches, though this view can, at the most, only apply to the purely Gentile Christian churches afterwards founded by Paul (and to these only during the apostle's life), but certainly not to that of Antioch, which has to be considered first in a criticism of the narrative in ch. xv.

In particular points of historical criticism Dr. Overbeck sometimes goes beyond even Baur and Zeller. Thus, he regards the episode of the Hellenists (vi. 1-13, viii. 1-4, xi. 19-30), at least in its present form, as an unhistorical "construction to account for Gentile Christianity;" the Hellenists were to prepare the way for Paul, and yet were not to be entirely severed from the primitive church. He forgets however that according to the Acts it was rather Peter who inaugurated the Gentile mission, and that any other preparation for the Pauline Gospel was thus rendered unnecessary. The compiler therefore can scarcely have invented the Hellenists, but merely availed himself of an earlier notice. The circumstance, adduced by Dr. Overbeck, that the Hellenists first of all act independently, and then appear dependent on Jerusalem, only proves that the latter feature was added by the compiler. The self-consciousness of Paul with respect to his mission by no means proves that he was the first in the field. The novelty of his gospel consisted, not in the admission of Gentiles, but in the religious equality of Gentiles and Jews in the church of the Messiah. But the exhibition of this as the fundamental principle of the Gentile mission requires us to assume that the mission itself was of earlier origin, not to mention the fact, that the elder apostles were not opposed to Gentile conversions in themselves, but only to the significance which Paul attached to them, and the consequences which he deduced. Even the conversion of Cornelius may be historical, though placed in an altogether unhistorical light, and probably in too early a period. If we consider further that Paul only came into conflict with Jewish Christianity fourteen years after his first appearance as an apostle to the Gentiles, and very soon afterwards separated from his companions, we shall arrive at the conclusion that he showed his originality, not in the Gentile mission as such, but in his distinctive gospel of faith in the cross of Christ, the ultimate consequences of which however he can only have developed gradually.

On the other hand, Dr. Overbeck has been the first to explain clearly the Ephesian period, and the significance of the so-called disciples of John. By means of a striking parallel between xviii. 24-xix. 7, and viii. 14-17, he shows that these disciples, who have only received "John's baptism," are no adherents of his, but actual Christians, who, like the Samaritans baptized by Philip, have received the baptism of water, but not that of the Spirit, and were to be first endowed with the πνεῦμα ἀγωνία by Paul. The reply in xix. 2, is of course put into the mouth of these Ephesians by anticipation, with reference to the following narrative. The episode of Apollos, however, who, when in Ephesus, preaches only to the Jews, and knows nothing of the baptism of the Spirit, until he is instructed by Paul's companions, is, as the editor shows, closely connected with the narrative which follows, and is designed as an evidence of the superiority of Paul as an actual apostle to Apollos as a mere apostle's assistant. There is also a new and interesting theory re-

specting xix. 23–41, in which Dr. Overbeck sees a final description of Paul's missionary activity among the Gentiles, combining all the points of view which characterize the writer of the Acts. Here too he seems to us to go too far in denying to the narrative all foundation in fact. Whatever objections however may be made on particular points, this commentary is at any rate a scientific production of the first rank, and by far the most important among all the recent works on the New Testament literature which have appeared in Germany.

R. A. LIPSIUS.

Contents of the Journals and Notes.

Theolog. Literaturblatt (Bonn; Rom. Cath.), Feb. 26.—Dietzsch's *Adam und Christus*, rev. by Maier.—Lucht's *Die letzten Capitel des Römerbriefs*, by Langen.—Allies' *Origin of Christianity*, by Kraus.—March 12.—Kraus' *Kirchengeschichte*, by Funk.—Zingerle's *Christomathia Syriaca*, by Röhling. [The reviewer points out the importance of Syriac texts as evidences of the antiquity of Catholic rites.]

Theolog. Tijdschrift (Dutch, Protestant).—Prof. Jowett's translation of Plato, rev. by Prof. van der Wijck. [On the sophist question.]—Contributions to the Criticism of the Synoptic Gospels [continued], by Prof. Loman.—Hugenholtz's *Christendom and Humanity*, rev. by Cramer.—Literary survey.

Dr. Keim, author of the *Geschichte Jesu*, has contributed two papers on the Arrangement of the Acts of the Apostles to the *Protestantische Kirchenzeitung* for February. He thinks the book divides naturally at ix. 31. Its object, to describe the course of Christian missions from east to west, under the conduct of Peter and Paul. The unhistorical element in it is exaggerated; even where this exists the narrative is told in good faith. Place of composition, Rome; time, A.D. 98–117.

Dr. Geiger replies to Hitzig's paper on Belitis and Osiris (*Isa. x. 4*, according to Lagarde) in *Jüdische Zeitschrift*, 1871, No. 4.

Mr. Crowfoot has completed his retranslation into Greek of the Curetonian Syriac Fragments of the Gospels. Although Dr. Cureton published an English version together with the Syriac text, it is dangerous (more so indeed than some critics are aware) to use this or any modern translation for critical purposes without some knowledge of Syriac. Hence Mr. Crowfoot's attempt. The editor candidly remarks in the preface (p. vi), "Hoc exemplar me denuo exhibuisse vix spero; sed textus, quem propter collationem Graece restitui, ejus structuram quodammodo indicabit." The most valuable portion of the second fasciculus is the attempted retranslations of the three pages of the Curetonian version recently deposited in the Berlin library, viz. John vii. 38–viii. 18; Luke xv. 22–xvi. 12; and xvii. 1–23, for the history of which see Dr. Wright's letter in the *Academy*, vol. ii. p. 468. We regret that Mr. Crowfoot has not appended some justificatory notes to his translation. The first part was reviewed by Dr. Payne Smith in *Academy*, vol. ii. p. 63.

A convenient handbook of ecclesiastical history from a Roman Catholic point of view, dedicated to Bishop Hefele, is being brought out by Dr. F. X. Kraus (published by Lintz at Trier). Commendable though inadequate reference is made to the works of Protestant critics. We are glad to be able to add that Alzog's *Handbuch der Kirchengeschichte* has reached a ninth edition.

A notable example of caution has been furnished by the Swedish ecclesiastical authorities. A commission has been sitting on the translation of the Bible for the last hundred years, without producing more than a tentative revision, which is still exposed to the criticism of scholars.

We believe we may state that M. Renan's *L'Antichrist*, the fourth part of his *Origines du Christianisme*, will appear very shortly.

New Publications.

CROWFOOT, J. R. *Fragmenta Evangelica, quae ex antiqua recensione vers. syriacae Novi Test. (Peshito dictae) a Gul. Curetino vulgata sunt, Graece redditæ, etc.* Pars altera. Williams and Norgate.

FRANKEL, Z. *Zu dem Targum der Propheten.* Breslau: Schletter.

Philosophy and Physical Science.

The Theory of Political Economy. By W. Stanley Jevons.
London and New York: Macmillan and Co.

THIS book claims to "call in question not a few of the favourite doctrines of economists." Its main purpose is to

substitute for Mill's Theory of Value the doctrine that "value depends entirely upon utility." The rate of exchange of two commodities will, when the equilibrium has been attained, be such that the utility to each individual of the last portion of the commodity which he obtains is only just equal to that of the last portion of the other commodity which at this rate he gives in exchange for it. The utility of a commodity is in part "prospective," that is, dependent on the benefit which will at a future time accrue from its possession: and this depends partly upon the difficulty that there might be in obtaining something before that time to supply its place. Though "labour is often found to determine value," it yet does so "only in an indirect manner by varying the degree of the utility of the commodity through an increase in the supply." Bearing in mind what has been said about prospective utility, it is almost startling to find that the author regards the Ricardian theory as maintaining labour to be the origin of value in a sense inconsistent with this last position. But the language of Ricardo on this point was loose with system: and that of many of his more prominent followers differs from his only in that its looseness is not systematic. By a natural reaction attempts have been made by a series of able men to found the theory of value exclusively upon the neglected truth.

Although the difference between the two sets of theories is of great importance, it is mainly a difference in form. We may, for instance, read far into the present book without finding any important proposition which is new in substance. But at length he definitely commits himself: at the end of his *Theory of Exchange* we read—

"Labour affects supply, and supply affects the degree of utility which governs value, or the ratio of exchange. But it is easy to go too far in considering labour as the regulator of value; it is equally to be remembered that labour is itself of unequal value I hold labour to be essentially variable, so that its value must be determined by the value of the produce, not the value of the produce by that of the labour."

The confusion here implied is not merely one of words. He returns again in his concluding remarks to his attack upon the ordinary theory of the variation of wages in different employments, and says "the wages of a working man are ultimately coincident with what he produces after the deduction of rent, taxes, and the interest of capital." He does not see that, since rent, taxes, &c. are not paid in kind, we must have before us a complete theory of value in order that we may perform this subtraction. He does not speak of the amount of the wages, and the exchange value of the products as varying elements, the variations of each of which affect those of the other. He considers that value is determined absolutely and independently, and that wages are determined afterwards. He goes on:—

"I think that in the equation,

$$\text{Produce} = \text{profit} + \text{wages},$$

the quantity of produce is essentially variable, and that profit is the part to be first determined. If we resolve profit into wages of superintendence, insurance against risk, and interest, the first part is really wages itself; the second equalises the result in different employments; and the interest is, I believe, determined as stated in the last chapter."

The attempts, here referred to, to give an account of interest independent of any theory of wages or value, is bold and subtle. The reasoning is mathematical; but the argument may be expressed by the following example. Suppose that A and B employ the same capital in producing hats by different processes. If A's process occupies a week longer than B's, the number of hats he obtains in excess of the number obtained by B must be the interest for a week on the latter number. Thus the rate of interest is expressed as the ratio of two numbers without the aid of any theory of value: expressed, but not determined; yet in the passage quoted it is spoken of as determined. The relative pro-

ductiveness of slow and rapid processes of manufacture is but one of the determining causes of the rate of interest: if any other cause made this fall, B's process would be abandoned. The rate of interest affects the duration of the remunerative processes of manufacture no less than it is affected by it. Just as the motion of every body in the solar system affects and is affected by the motion of every other, so it is with the elements of the problem of political economy. It is right and necessary to break up the problem; to neglect for the time the influence of some elements; to investigate the variations of any one element which must, *caeteris paribus*, accompany certain assumed variations in one or more others. Such investigations give results which, even as they stand, are roughly applicable to certain special cases. But this does not justify us in speaking, in general, of one element as determined by another; as, for instance, of value as determined by cost of production, or of wages as determined by value. It is difficult to remember a prominent Ricardian writer who has not attained brevity at the expense of accuracy by employing the former of these expressions. Professor Jevons' use of the latter of them will have done good service if it have called attention to the danger of such parsimony.

The main value of the book, however, does not lie in its more prominent theories, but in its original treatment of a number of minor points, its suggestive remarks and careful analyses. We continually meet with old friends in new dresses; the treatment is occasionally cumbrous, but the style is always vigorous, and there are few books on the subject which are less open to the charge of being tedious. Thus it is a familiar truth that the total utility of any commodity is not proportional to "its final degree of utility," i.e. the utility of that portion of it which we are only just induced to part with, or to put ourselves to the trouble of procuring, as the case may be. But Professor Jevons has made this the leading idea of the costume in which he has displayed a large number of economic facts. In estimating, for instance, the benefit of foreign trade, we must pay attention to the total utility of what we obtain by it, as much as to its final utility, which alone is indicated by the rate of exchange. His attack on Mill on this point is worth reading, though it is in parts open to criticism; and though while Mill pleads the difficulty of the subject in excuse of his neglect of the total utility of international trade, Jevons does not overcome the difficulty. Again, the whole advantage of capital to industry—its total utility—cannot be measured by the rate of interest, which corresponds only to its final degree of utility. Again, the final degree of utility to a labourer of his wages diminishes as their amount increases, while the final degree of pain resulting from the labour, at all events after a certain time, increases as the amount becomes greater: consequently, the artisan as soon as his real wages have ceased to be barely sufficient for his support, strikes for shorter times, rather than for the further increase in wages.

Among his more interesting incidental discussions are those on the difficulties Thornton has found in the theory of value, and on the economy of muscular effort. He contributes to the definition of the terms "market," "labour," "capital," "circulating capital," but he does not keep sufficiently distinct the various connections in which each of them is employed. His lucidity serves to render darkness visible; to make us conscious of the absence of a specialised economic vocabulary, perhaps, on the whole, the severest penalty that the science has paid for its popularity. He supplies, indeed, one expression which, with a little more care, might be rendered a useful one. Capital which "consists of a suitable assortment of all kinds of food, clothing,

utensils, furniture, and other articles which a community requires for its ordinary sustenance," he calls "free capital," because it "can be indifferently employed in any branch or kind of industry." The term "value," indeed, he considers as hopeless, and he expresses an intention, to which he does not adhere, of avoiding its use.

"Value in exchange expresses nothing but a ratio, and the term should not be used in any other sense. To speak simply of the value of an ounce of gold is as absurd as to speak of the ratio of the number seventeen."

There does not seem to be any greater absurdity in speaking of the value of an ounce of gold, or of a cubic inch of gold, than there is in speaking of the weight of a cubic inch of gold. In each case reference is made to some unit conventionally adopted at some particular place and time. He complains that "persons are led to speak of such a non-entity as intrinsic value": but the examiner, who has asked for a definition of specific gravity, is fortunate if he has not heard of "intrinsic weight." The abuse of a term is not a sufficient cause for its rejection. We cannot afford to dispense with the phrase "the rate of wages," though Ricardo has employed it in a forced sense, which Professor Jevons himself has failed to catch.

He has done good service, moreover, in protesting against Mill's saying:—"Happily there is nothing in the laws of value which remains for the present or any future writer to clear up; the theory of the subject is complete." It is probable that Mill intended this to be interpreted in a very narrow sense; but anyhow, it is unfortunate. As Jevons says, it would be rash to make such a statement about any science. It would be very rash to make it about the law of gravitation. Mill would probably have been more correct if he had stated that, taking into account only questions which have already occurred, there is no one side of the theory of value which does not require for its completion a greater amount of scientific investigation than has, up to the present time, been applied to the whole of political economy—that there is scarcely any question which can be asked with regard to value to which a complete answer is forthcoming. Take, for instance, a question which Professor Jevons has made prominent—What is the influence which a rise in price of hats, owing to an increased demand, has on the wages of hat-makers? Of course one element to be considered is the facilities which exist for introducing new workmen into the trade. How far, then, is this dependent on the number of parents occupied in this and other employments who have been able to give their sons an education sufficiently good to fit them to become hat-makers, but not a much better one. What is the relation between the cost of production of an average skilled labourer and his remuneration? This is but one question out of many. We know, perhaps, in what direction to look for the answers: but the point is that they are not yet formulated. And who can tell what difficulties will have to be overcome before they are formulated?

Professor Jevons has expressed almost all of his reasonings in the English language, but he has also expressed almost all of them in the mathematical. He argues at great length and with much force the applicability of mathematical method to political economy:—

"If there be any science which determines merely whether a thing be, or be not—whether an event will happen, or will not happen—it must be a purely logical science; but if the thing may be greater or less, or the event may happen sooner or later, nearer or further, then quantitative motions enter, and the science must be mathematical in nature, by whatever name we call it."

He insists that mathematics have been successfully employed in physical sciences of which the data are very inexact; and that innumerable possibilities of economical

statistics exist already half tabulated in the books of mercantile houses great and small. His remarks on these and some similar points are singularly good. In general, indeed, he makes but little use of mathematical methods of reasoning. And he has not even fully availed himself of the accuracy which he might have derived from the use of the language. He does not always point out what are the variables as a function of which his quantities are expressed. It is often necessary to understand independently the whole of his reasoning, in order to know whether he means his differential co-efficients to be total or partial; and in several cases he seems almost to have himself forgotten that they are total. He has expressed the fact that "the last increments in the art of exchange must be exchanged in the same ratio as the whole quantity exchanged" by the equation

$$\frac{dy}{dx} = \frac{y}{x}$$

He does not indicate the existence of any relation between the Δy and Δx , of which he considers dy and dx to be the limits, which can constitute $\frac{dy}{dx}$ a differential co-efficient: the mathematical phrase merely confuses. Some amusement has been derived from the absurd result which is obtained by integrating the equation. But this implies a misapprehension. A point on a locus may be determined by an equation with a differential co-efficient in it. If we integrate the equation, we get not this locus, but some other intersecting it at the point to be determined. An instance of a different kind of inaccuracy for which his making use of mathematical language leaves him without excuse, occurs in his investigation of the influence on the rate of international exchange exerted by a tax on imports. He tacitly assumes that the government levies the tax in kind, and destroys it, or, at all events, consumes it in such a way as not to interfere with the demand there would otherwise have been in the country for it.

We owe several valuable suggestions to the many investigations in which skilled mathematicians, English and continental, have applied their favourite method to the treatment of economical problems. But all that has been important in their reasonings and results has, with scarcely an exception, been capable of being described in ordinary language: while the language of diagrams, or, as Professor Fleeming Jenkin calls it, of graphic representation, could have expressed them as tersely and as clearly as that of the mathematics. The latter method, moreover, is not well adapted for registering statistics until the laws of which they are instances have been at least approximately determined: and it is not intelligible to all readers. The book before us would be improved if the mathematics were omitted, but the diagrams retained.

ALFRED MARSHALL.

Samuel Clarke's Life and Doctrine. [Samuel Clarke's Leben u. Lehre. Ein Beitrag zur Geschichte des Rationalismus in England. Von R. Zimmermann.] (Academy Reprint.) Wien: in Comm. bei Gerold's Sohn, 1870.

DR. ZIMMERMANN'S careful study of "the one English Aprioriker," as he terms Dr. Samuel Clarke, is a noteworthy exception to the general neglect of English metaphysics—except the single development of Empiricism from Locke to Hume—which prevails among German students of the history of Philosophy. Clarke, indeed, has a closer relation to continental thought than any other English thinker from Locke to Coleridge. His philosophico-theological system was developed in conscious antagonism to Spinoza: and ten years after the publication of this had established his philosophical reputation—just when his reasoned theism

had, alas! proved to be heretical theology—he was called upon to defend against Leibnitz the metaphysical principles which he held in common with his friend and master Newton. Dr. Zimmermann has given a careful and impartial analysis of Clarke's system, and an able summary and criticism of the controversy with Leibnitz. In describing Clarke as "ebenbürtig" to his two great antagonists, he does him certainly more than justice. He is a clear and vigorous reasoner, and has a genuine confidence in the completeness of his system: but one finds in him too much of the "crassa Minerva" that runs through English metaphysics: the solid, cautious common-sense that avoids inconvenient inferences from its premises by the artificial expedient of declining to draw them. Such a metaphysical temper, matched against the iron consistency of Spinoza, or the ever-active acumen and constructive ingenuity of Leibnitz, shows an inferiority of speculative insight for which no dialectical vigour can compensate. Clarke failed to understand the intellectual needs out of which Spinoza's system sprang: and was too uncritical to see the remarkable coincidence (up to a certain point) between that "atheist's" doctrine and his own. His "Self-existent Being," of which infinite space is a *property*, corresponds closely to Spinoza's one "substance" with its attribute extension.

And yet when we come to the real issue between the two thinkers, we find Clarke's most cardinal and characteristic conclusion—from the *contingency* in the material universe to Free-Will in its eternal and necessary cause—scarcely presented in a proper light by Dr. Zimmermann. In the first place, he complains of Clarke's inconsistency of method, in using at this point *a posteriori* argument. But Clarke has never bound himself to adhere to the "high *priori* road": it is only his German critic who insists on regarding him as a "Vertreter des Rationalismus" in conflict with the "Sensualismus" of Locke. With Locke's system as a whole Clarke seems to have had no quarrel: he acquiesces in his refutation of innate ideas; he only objects to his suggestion of the possible materiality of the soul, and to "some materialists who approved in Mr. Locke's writings nothing but his errors."* Dr. Zimmermann scarcely understands the naïve and confident dogmatism of the disciple of Newton, writing in the full triumph of demonstrated harmony between *a priori* reasoning and empirical observation. No doubt of the absolute correspondence of Thought (in either department) to Things ever entered his head. But, objects Dr. Zimmermann, experience does not inform us of the contingency of its objects: it does not tell us what things might or might not have been, but only what they are. This again is insisting on a separation of methods foreign to Clarke's manner of thought: it is enough for him that the object presented in experience is apprehended as contingent by an intuition as naturally certain as any other, to whatever faculty it may belong: indeed, strictly speaking, this conception of Divine Free-Will is not found in either *a priori* or *a posteriori* cognition of the universe, but in the point of union between the two. And certainly he touches here the radical weakness of Spinozism (and other forms of Rational Pantheism): the unexplained *modus transcundi* from the necessary and eternal Being to the arbitrary determinateness which we find in the world of experience. The defect of Clarke's view (apart, of course, from the general objection to his dogmatic method) is not so much that he applies to this *modus transcundi* the conception of Free-Will—no more appropriate notion having ever been

* It is curious that on this point Dr. Zimmermann puts to the address of Hobbes an argument obviously directed against Locke (or his disciples). Cf. p. 39.

suggested—as the shallowness of his reconciliation of Divine Free-Will with the principle of universal causation on which his *a priori* reasoning proceeds. And hence his treatment of the category of "sufficient reason," in which Leibnitz tried to transcend the distinction of Final and Efficient cause, is simply unintelligent: he cannot or will not see that the Divine preference for one of two intrinsically indifferent determinations of finite existence is a fact requiring explanation.

Nor does Clarke show himself more appreciative of that other Leibnitian principle of the "identity of indiscernibles," or, to put it positively, the necessary qualitative diversity of individuals. But in combating this, he gains a controversial advantage which Dr. Zimmermann seems to have overlooked: as Leibnitz certainly contradicts himself, in one place allowing, in another denying, the *conceivability* of two perfectly similar individuals. Cf. Letter iv. § 6—"Poser deux choses indiscernibles, est poser la même chose sous deux noms:" and v. 25—"Je ne dis point qu'il soit impossible absolument d'en poser, mais que c'est une chose contraire à la sagesse divine." And in so far as Leibnitz sets against the *conceivability* of numerically different indiscernibles their non-existence in our experience, he is certainly open to the charge of inopportune empiricism which Dr. Zimmermann has previously made against Clarke.

As a whole, the monograph is chiefly defective in indicating Clarke's relations to English philosophy generally. I have noticed an instance of this in the supposed antagonism to Locke: whereas in fact there is as much agreement between Locke's proof of the existence of a God, and the more developed and precise demonstration of Clarke, as there commonly is between any two thinkers classed as of the same school.* Again, by presenting Clarke in connection with Herbert of Cherbury, the uncritical character of his dogmatism is missed. In Clarke's metaphysic the methodological side is kept quite in the background: there appears no explicit theory of the criteria of truth. H. SIDGWICK.

DISCOVERY OF AN EXTINCT GIGANTIC BIRD OF PREY IN NEW ZEALAND.

TO THE EDITOR OF THE ACADEMY.

SIR.—Mr. F. Fuller, while directing some excavations in a marsh on the Glenmark estate, province of Canterbury, South Island, New Zealand, by permission of G. H. Moore, Esq. (whose researches have added so greatly to the evidences of the extinct birds of New Zealand), found, among remains of *Dinornis* exhumed at a depth of five or six feet from the surface, a few smaller bones, including claw-phalanges, which Mr. Fuller recognised as belonging to a large bird of prey.

With two claw-phalanges were found a left femur, a vertebral rib with its ankylosed "epipleural appendage;" and, in a watercourse about two miles from Glenmark, a mutilated right humerus was subsequently discovered, and pronounced by Dr. Haast to be raptorial, and, as well as other and better preserved bones, most nearly resembling the corresponding bones of the New Zealand harrier (*Circus assimilis*, Jardine).

Dr. Haast, F.R.S., the accomplished state-geologist of the province of Canterbury, has communicated an instructive and interesting memoir on these remains to the *Transactions of the Philosophical Institute of Canterbury*. He refers the gigantic raptorial bird of New Zealand, which was twice the size or bulk of the great wedge-tailed eagle of

* It is worth noticing how Locke is even led to suggest that involuntary approximation to Spinozism (by connecting Extension with Deity) which is a characteristic doctrine of Clarke's metaphysic. Locke, in defending the Vacuum against the Cartesians, finds himself in a dilemma: "Is Space something or nothing?" He does not like to assert that it is *some thing*, and yet, "if there is nothing between two portions of matter, they must be in contact." In this difficulty he finds relief in the conception of God "filling immensity;" so that where there is no matter there is not nothing, but God. (Cf. *Essay, &c.* ii. c. xiii. §§ 16, 17, and c. xv. § 3.)

Australia (*Aquila audax*, Gould), to a genus *Harpagornis*, Haast, giving it the specific name *Moorei*, after the liberal partner of Kermodde and Co., owners of the Glenmark property. He conjectures, on good grounds, that this huge raptorial bird preyed upon the young or feeble individuals of the genus *Dinornis*, and, with them, became extinct.

Dr. Haast deduces from this discovery an additional confirmation of his belief that the present aborigines of New Zealand do not possess any traditions about the gigantic Moas, and writes, "that, if trustworthy traditions about the *Dinornis* had been handed down to us, the still more alarming existence of this gigantic bird of prey contemporaneous with the former would most certainly have also been recorded."

I may remark that the individual who, in 1839, submitted to me, with other New Zealand rarities, the fragment of bone which gave the first evidence of great wingless birds in that island, stated that the natives from whom he obtained it had "a tradition that it belonged to a bird of the eagle kind which had become extinct, and to which they gave the name of 'Movie'" (*Proceedings of the Zoological Society of London*, Nov. 12, 1839, p. 169).

I am now, of course, disposed to attach more weight to this tradition than when it rested on a fossil proved to belong to a bird which could not fly, and which was at least as large as an ostrich.

We may suppose the great raptorial species which we now know to have co-existed with the *Dinornithes* to have survived, by reason of its greater powers of escape, some time after the extinction of its principal prey; and the tradition of the great bird "of the eagle kind" may be a consequence of the knowledge of the *Harpagornis* continuing down to later generations of Maories than those who hunted down the huge herbivorous flightless birds.

RICHARD OWEN.

British Museum, March 12, 1872.

Scientific Notes.

Geology.

Fossil Bird from the Cretaceous Formation of Kansas.—Professor Marsh reports to the *American Journal of Science* the discovery, during his explorations in 1871, of a remarkable fossil bird in the Upper Cretaceous of Western Kansas. The remains consist of the greater portion of a well-preserved skeleton, at least five feet in height. Although that of a true bird, as is shown by the vertebrae and other parts, it widely differs from any known recent or extinct form of the class, and affords a fine example of a comprehensive type. The femur is very short, the other portions of the legs are elongated, and the metatarsal bones appear to have been separated. On his return, the Professor proposes to describe this unique fossil under the name of *Heptavornis regalis*.

The River Courses of England and Wales.—At the meeting of the Geological Society of London on the 7th February, Prof. Ramsay described the changes in the physical conformation of Britain during the Jurassic and Cretaceous periods, and the relations which the deposits formed during these periods bear to the Palaeozoic rocks of Wales and the northwest of England. The Miocene period of Europe was essentially a continental one, and was closed by important disturbances of strata in Central Europe, one effect of which would be to slightly tilt the secondary formations of France and Britain towards the north-west. In this way he explained the north-westerly direction of many of the rivers of France; and he surmised that at this period the rivers of the middle and south of England also took a westerly course. The westerly slope of the cretaceous strata of England was the cause of the southern flow of the Severn between the hilly land of Wales and the long slope of chalk rising towards the east. The Severn would thus establish the commencement of the escarpment of the chalk, which has since receded far eastward. The author believes that after the Severn had cut out its valley the Cretaceous and other strata were gradually tilted eastwards, causing the easterly course of the Thames and other rivers of Southern and Eastern England. In these and other cases, the sources of these rivers were originally on the chalk near its escarpment; while to its recession, followed by the formation of the oolitic escarpment, its present relation to the river-courses must be ascribed. The author also indicated the relations of the courses of the rivers of the north of England to the general dip of the strata.

The Zoological Provinces of the Jurassic Period.—Dr. M. Neumayr, of Vienna, divides the entire Jurassic deposits of Europe into three groups: a Mediterranean group; one comprising Central Europe; and, lastly, a Russian group. The Mediterranean group, which includes rock-deposits in Spain, the Cevennes, the Alps, Italy, the Carpathians, and the Balkan range, is wanting in many of the beds that are met with, rich in fossils, in the group of Central Europe, inclusive of

France and England ; it is, on the other hand, characterized by the occurrence of vast numbers of species of *Phylloceras* and *Lytoceras*. Corals existed in great abundance in the Mediterranean group, as well as in that of Central Europe, but are not found in the Russian province. The general aspect of the different faunes of these three groups is not sufficiently dissimilar to allow us to assume that they were separated by land. That, no doubt, would have occasioned as entire a difference in the animal life of those parts of the ocean thus divided as is seen to this day at Suez or Panama, or in the Kimmeridge clay of South Germany and of Northern France. The Mediterranean or most southern group abounds in forms of *Phylloceras* and *Lytoceras* ; while in Central Europe alone the genera *Oppelia*, *Aspidoceras* are found, and here the reef-building corals find their northern limit. The Russian Jurassic provinces, embracing Northern Russia, Spitzbergen, and Greenland, has likewise a fauna of its own. Neumayr attributes these differences in animal life to climate, which in that period must have been somewhat warmer than the present, for the northern boundary line of corals was then about 25 degrees of latitude higher than it is now. (*Verh. der k. k. geol. Reichsanstalt*, No. 3, 1872, p. 54.)

Physiology.

Phosphorescence.—Professor Pancevi, of the University of Naples, has just published a memoir on this highly interesting subject, in the fifth volume of the *Atti della Reale Accademia delle Scienze fisiche e matematiche*, 1871, under the title "Gli Organi luminosi e la Luce delle Gennatule." It consists of two parts, one anatomical, the other physiological. He notes the existence of special organs which have the power and apparently the function of producing phosphorescent light, and finds that the light is only emitted by the Polyps and the Zoids, while the phosphorescent organs, as he terms them, consist of eight "cordoni luminosi," which are attached to the outside of the stomach of the Polyps and Zoids, and are prolonged in each case as far as their mouth-papillae. These threads (cordoni) are principally composed of a tissue built up of vesicles or cells and possessing all the characters of fat; albuminoid cells are likewise met with in it. This fatty matter generates light, not only by the direct excitation of the Polyps and the Zoids themselves, but by excitation of the whole trunk of the Pennatula. In the latter case the author has made the remarkable discovery that the progress of the light developed in succession over the several parts of a polyp gave a striking indication of the direction, progress, and rapidity of the excitation applied to the Pennatula, and he has found these latter calculable, a fact of the greatest interest to physiologists. Professor Pancevi further states that the phosphorescent substance produces light, after its removal from the body of the polyp, if subjected to mechanical treatment such as friction and compression, or the action of chemical agents, electricity or heat. And this is the case when the substance is extracted, not only from the living animal, but some short time after its death. The author, in his earlier investigations of the phosphorescence of other fatty substances, considered the phenomenon due to their slow oxydation. He believes this holds good in the case of the "cordoni luminosi" of the Pennatula, and thinks it to a certain amount subject to the voluntary powers of the animal. He found similar phosphorescent substances in the epithelium of Medusae, and in Pholas he saw two distinct organs inside the mantle which are furnished with the power of becoming luminous. Some Chaetopteri, Beroe, and Pyrosoma were likewise examined, and a great similarity noticed in all these cases as regards the constitution of the phosphorescent substance. In the spectroscope the light exhibits one broad band like that given by monochromatic light, while, as is well known, the phosphorescent light of *Lampyris* and *Luciola* is polychromatic.

Mode of Increase of the Long Bones.—A paper on this subject appears in the last part of the *Archives de Physiologie*, by MM. Philippeaux and Vulpian. The views generally adopted in regard to the mode of growth of the long bones, both in length and diameter, have been called in question by Wolff and Volkmann in papers recently published ; and MM. Philippeaux and Vulpian's researches were undertaken with the object of ascertaining whether their objections are well founded. The doctrine supported by the authority of Duhamel, Hunter, and Flourens, and generally accepted, is that the long bones increase in length by additions to the extremities in the form of new layers between the shaft or diaphysis and the articular portion or epiphysis, while they become broader by the deposition of new bone in the periosteum on the outer surface of the bone. M. Wolff, on the other hand, maintains that the growth of bone is interstitial, and that each part of the bone takes part in the enlargement. He points to the persistence, during growth, of the position and relations of the peculiar and geometrically arranged trabeculae of the cancellous texture constituting the head of the bone, which could hardly occur on Duhamel's theory. He denies Duhamel's statement that a ring surrounding the bone of a young animal comes by degrees to occupy the shaft of the bone, owing to absorption of the old bone and the superposition of new ; but contends that the old bone is pressed inwards, and is certainly not absorbed. He further states that when wires are passed through both the

epiphysis and two points of the diaphysis, the distance between the two latter augments just as much as the distance between the wire passing through the epiphysis and that through the diaphysis lying nearest to it. MM. Philippeaux and Vulpian oppose M. Wolff's statements. They state that rings encircling the bone, as well as metallic lamellae, interposed between the periosteum and osseous tissue in young animals, do actually cut their way till they are free, or almost free, in the medullary cavity ; and they refer to specimens made by themselves in Flourens' laboratory, and now in the Musée Dupuytren, in confirmation of their theory. As regards the separation of metallic threads drilled into the bone, they think that in Wolff's experiments the two wires passed into the shaft of the bone were too near the epiphysis to furnish any satisfactory result. Finally they give the details of a series of experiments conducted under Flourens' direction, in which madder was given to young pigs up to a certain period, when one of the litter was killed, and its bones prepared as objects of comparison with those of the rest, which were killed afterwards at stated intervals up to eighteen months. The bones of these animals, they declare, clearly demonstrate the correctness of the old doctrine, and prove irrefragably that all increase in diameter is due to fresh subperiostic deposits, whilst all increase in length is caused by the progressive ossification of the osteological elements supplied by the cartilage of conjugation between the diaphysis and the epiphysis. Moreover their experiments incidentally showed that the long bones increase in length more at one extremity (the upper or proximal) than at the other.

Structure of the American Spongilla.—An essay by Prof. H. James-Clark, of Lexington, Kentucky, appears in the current number of the *Monthly Microscopical Journal*. Prof. James-Clark holds that each ciliated body of a sponge is a cephalic member of a polycephalic individual, a view widely differing from the one entertained by Haeckel and others, that Sponges are essentially compound Polypi, the afferent and efferent ostioles of the former corresponding with the mouths of the latter ; while the branching canals of the Sponges are comparable with similar canals in the polypidom of Halcyonarians ; and by implication the cilia-bearing cells of the interior lining-wall of the Zoophyte find their homologues in the ciliated cell-like bodies of the interior chambers of the Porifera. The sponge examined by Prof. James-Clark he names *Spongilla arachnoidea*, from its resemblance to an irregular spider-web. It is a fresh-water species, clinging to the stems of water-plants, and avoiding light. It may grow to be several inches in diameter, is of yellowish-brown colour, and has a filmy envelope or investing membrane enclosing a cytoplasmatic basis in which the monads are imbedded, and of which the outer part may be regarded as an internal investing layer. The investing membrane is composed of a diffuse blistema, containing nucleated cells which, however, have no cell-wall. The monad-cephalids, as he calls them, correspond functionally to the tentacular heads of Polypi. They are collected into groups in the substance of the cytoplasmatic mass that differs but little in structure from the outer envelope. They consist of a roundish or oval monad chamber, lined continuously by a stratum of craspedote flagellate monads, identical in structure with those described by James-Clark himself in *Leucoselenia*, and by Carter in *Grantia compressa*. These monads consist of a body resembling an ameboid cell, to which a collar or cylindrical tube is attached ; emanating from the body, traversing the whole length of the tube, and projecting from its orifice, is a single flagellum which vibrates throughout its length, but is most active near the tip ; it is non-transparent, and resembles a black thread. Two or three clear contractile vesicles are contained in the body of each monad. The systole and diastole are extremely slow, but the last thread of the systole is abrupt. Arising more or less obliquely from the monadigerous mass are numerous slender slightly curved acicular spicules, which act as props to support the outer investing membrane to which they properly belong. The specimens examined by James-Clark presented no canalicular system, and he attributes its absence to their having been too young.

Chemistry.

The Solubility of Silver Chloride.—In precipitating this chloride from dilute solutions, a point is reached where the silver solution gives a precipitate with a decimal solution of silver nitrate, although a decimal solution of an alkaline chloride will likewise cause a turbidity and the separation of silver chloride. If the liquid be divided into two equal parts, and silver nitrate be added to the one and an alkaline chloride to the other, it will be observed that in the latter case the turbidity is to a considerable degree the greater. By proceeding in this manner, in proportion as silver chloride is thrown down by the successive addition of the decimal hydrochloric acid solution, the turbidity caused by a given volume of the silver liquid in one-half the solution increases, while that produced by a volume of acid decreases ; at last a point can be reached where equivalent quantities of the two reagents in equal volumes of the solution produce the same turbidity. Then by cautious addition of the acid reagent an order of things the reverse of the above is observed ; the solution becomes more and more turbid

by the addition of the silver solution and less and less so with the chloride, till finally the latter reagent causes no precipitate and that containing silver a strong one. This behaviour of silver chloride being of importance in its bearing on Gay-Lussac's scheme of volumetric analysis, Stas set himself the task of determining the nature of these curious changes (*Comptes rendus*, 73, 998). He finds that silver chloride can exist in four different states: 1, the gelatinous; 2, the caseous or flocculent; 3, the pulverulent; and 4, the granular, scaly, crystalline, or fused condition. The chloride of the fourth kind is insoluble at ordinary temperatures; at any rate its solubility does not reach the limit at which dissolved silver can be detected: this limit the author estimates at $\frac{1}{100000}$. In boiling water its solubility is proportionally very great, decreasing with the temperature; it cannot be recognised below 15° . The variety most soluble in pure water is the caseous chloride formed by precipitating cold dilute solutions; the solubility, however, decreases as the flocks condense of themselves, or on their conversion by long agitation with water, either pure or acidulated with nitric acid, into the pulverulent form. A solution of flocculent or pulverulent chloride in pure or acidulated water will form a precipitate with a silver salt or with an alkaline chloride. The quantities of silver (as silver salt) and chlorine requisite for the precipitation of the silver chloride are accurately in the ratio of the molecular weights of the silver salt and chloride employed. The quantity of silver and, conversely, the quantity of chlorine required to precipitate a unit of silver or chlorine in the form of dissolved flocculent or pulverulent silver chloride are in the ration of 3 : 1. The presence of salts resulting from the decomposition does not effect the solubility of the silver chloride in pure or acidulated water. The precipitation of flocculent or pulverulent silver chloride from its solution in pure or acidulated water is due to its being insoluble in liquids having in solution an amount of silver or chlorine which is three times that present in the dissolved silver chloride itself. Saturated solutions of granular silver chloride are likewise precipitated by alkaline chlorides and silver salts, the precipitation of a unit of silver or of chlorine as silver chloride in this case also requiring three units of chlorine or of silver; the separation of the dissolved granular chloride, however, is never complete, no matter how great an amount of silver as silver salt or chlorine as alkaline chloride be added for the purpose. From saturated solutions about six-tenths of the chloride can be separated.

The Action of Phosphorus Perchloride on Nitronaphthalin.—In several attempts made by Oppenheim to act on nitro-derivatives of benzol and naphthalin with the chlorides and oxychloride of phosphorus, no change whatever was observed even at high temperatures. L. de Koninck and P. Marquart, in a paper in the *Bull. de l'Acad. royale des Sciences de Belgique*, 1872, No. 2, 122, record a remarkable exception. Between 120° and 150° phosphorus perchloride acts on nitronaphthalin in the following way:—



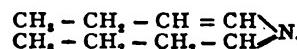
The chloronaphthalin was readily obtained from the product sufficiently pure for analysis. Phosphorus perchloride has no action on dinitronaphthalin; and nitrobenzol, after an hour's heating with the perchloride, yielded no chlorobenzol. The anomaly noticed above can be traced in other instances. Hydrogen bromide reduces nitrobenzol with the formation of bromanilines, while nitronaphthalin exchanges nitrogen for bromine. Phosphorus pentasulphide acts with violence on nitronaphthalin, but may be boiled with nitrobenzol without effecting any change.

Eulyte and Dyslyte.—These substances, first obtained by Baup in 1851, have been submitted to a very careful examination by H. Bassett (*Journal Chem. Soc.*, February, 1872). They are obtained by oxidising with nitric acid citraconic acid, a product of the destructive distillation of citric acid. An oily substance, resulting from the action, consists of a mixture of two neutral crystalline compounds that can be separated only with extreme difficulty, and after many fractional recrystallizations. Eulyte, the more soluble body, separates from warm chloroform in large prismatic crystals with very perfect brilliant faces; they have been measured by Prof. Miller, of Cambridge. Its melting point is $99^{\circ} 5$, and it appears to sublime unchanged. Several analyses gave numbers corresponding with the formula $\text{C}_6\text{H}_8\text{N}_4\text{O}_2$. Mr. Bassett's investigation of the proximate constitution of this substance has been attended with considerable difficulties and greatly delayed through want of a sufficient stock of material. Dyslyte is less soluble and less fusible, melting at 189° ; it crystallizes well from alcohol, and has the formula $\text{C}_6\text{H}_8\text{N}_4\text{O}_2$.

The Distribution of Caesium in the Mineral Kingdom.—Some new sources of this metal have recently been discovered. At the meeting of the Chemical Society on the 7th March a paper was read by Col. Yorke on the water of the hot spring of Wheal Clifford. It had been previously ascertained by the late Prof. W. A. Miller that it contains a considerable amount of lithium. The Colonel finds 17 parts of caesium chloride in one million parts of the water: making it ten times richer in this metal than the Dürkheim spring in which Bunsen originally discovered caesium. E. Bechi has published (*Jahrbuch für*

Mineralogie, 1872, No. 1, 95) the results of an examination of a beryl from Elba, in which is 0.88 per cent. of caesium. It will be remembered that the island of Elba is the locality of pollux, the mineral that contains the greatest percentage of this metal.

Paraconine.—H. Schiff has continued the study of the alkaloid which he succeeded in obtaining synthetically (*Ber. d. Deut. Chem. Gesell. Berlin*, 1872, No. 2). Butyraldehyde and alcoholic ammonia were exposed to the sunlight of last summer, and, after the removal of what would pass off by distillation, the residue was heated for a day to 130° – 150° , and distilled in a current of hydrogen. By treating the distillate with acid and potash, and subjecting the purified material to fractional distillation in hydrogen, a product was at length obtained that passed over between 160° and 170° , and contained the greater portion of the conine. It resembles in most of its chemical characters the natural alkaloid, exhibiting in addition to those already described by Schiff in an earlier paper the reaction with phosphomolybdic acid. Numerous experiments on animals showed its poisonous qualities to be as energetic as that extracted from hemlock. In their boiling points and densities they agree: the coefficient of expansion of Schiff's conine is somewhat greater, and its solubility in water rather less than those of natural conine. The chief physical distinction lies in the artificial conine producing no rotation. The chlorhydrate of the latter base is more readily crystallized; the chloroplatinates are alike in habit and mode of decomposition with water. Its reaction with methyl iodide shows that the artificially formed base contains no hydrogen that can be replaced. The author believes its probable constitution to be represented by the formula:—



The supplement volume of Watts' *Dictionary of Chemistry*, which has just been issued, records the discoveries in pure and applied chemistry and the allied branches of other sciences that have been made since the publication of the fifth volume some years ago. The new volume, as bulky as any of its predecessors, has been prepared with the care and completeness which characterized the others. Many of the former contributors have again aided the editor: of them, Professor G. C. Foster has written the articles on Heat and Electricity; Dr. M. Foster, that on Proteids; and Prof. Roscoe, those on Light and the applications of spectral analysis to terrestrial chemistry and astronomy. Many of the articles on theoretical and practical subjects which are not signed, and are, it is presumed, from the pen of Mr. Watts, are of great value and interest, such as those on the Aromatic Series and Arsenic. Many very recent researches have been incorporated: Gore on Hydrogen and Silver Fluorides, Roscoe on Vanadium, Schiff on Conine, are all to be found here. Weidel's carmine, however, is not mentioned. In the description of so important a compound as hydroxylamine, it is to be regretted that a reference is not given to Lossen's original memoir rather than to a transcription. Minerals in certain cases have met with somewhat meagre treatment; Beustite, for example, is described as "a shining mineral, containing lime, potash, and soda," while of groppite, although the mineral is mentioned, the composition is altogether omitted. In some cases the authors have not selected entirely new material. Of iron are recorded facts that are certainly not new; while some of these (to give an example, the property of iron to remain unoxidised in pure water) appear to owe their presence here to their having been rediscovered and communicated afresh to the Chemical Society.

Attention is directed in *Im Neuen Reich*, No. II., 1872, to the circumstance that in September next half a century will have elapsed since, at Oken's instigation, the *Deutsche Naturforscherversammlung* held their first meeting at Leipzig. It was determined last year at Rostock that the city which had the honour of founding the association should be chosen for the celebration of the anniversary.

We learn from the *Revue scientifique* that it is proposed to organize an International Medical Congress at Vienna, in 1873, during the season that the International Exhibition is open.

Letters from Palermo, Rome, and other towns in the south of Italy, mention a fall of red or blood-coloured rain on the 10th and 11th of March, after atmospheric conditions which had led M. Tarry, of Paris, and P. Denza, to expect such a phenomenon. The particles of sand which cause the colour are found on analysis to be exactly similar to the sand of the African deserts.

New Books.

- BEHRENS, H. *Mikroskopische Untersuchungen über die Opale.* Wien: Gerold's Sohn.
 BENTHIN, F. *Lehrbuch der Sternkunde in entwickelnder Stufenfolge.* Leipzig: Fleischer.
 BERTHELOT, M. *Traité élémentaire de Chimie organique.* Paris: Dunod.

- DIPPEL, L. Das Mikroskop und seine Anwendung. Schluss-Abtheilung. Braunschweig : Vieweg.
- FUCHS, C. W. C. Die künstlich dargestellten Mineralien. Haarlem : Loosjes.
- GÉRARD, Ch. Essai d'une Faune historique des Mammifères sauvages de l'Alsace. Colmar : Barth.
- GOHREN, Th. v. Die Naturgesetze der Fütterung der landwirthschaftlichen Nutzthiere. Leipzig : Hirschfeld.
- HAROLD, E. v. Coleopterologische Hefte. VIII. Leipzig : Rossberg.
- HYRTL, J. Die doppelten Schläfelinien der MenschenSchädel und ihr Verhältniss zur Form der Hirnschale. Wien : Gerold's Sohn.
- MARTIUS, C. T. P. DE. Flora Brasiliensis. Fasc. 55 et 56. Leipzig : Fleischer.
- MATTHÄI, F. Die Industrie Russlands in ihrer bisherigen Entwicklung und in ihrem gegenwärtigen Zustande. I. Band. Leipzig : Fries.
- STEFAN, J. Diamagnetic Induction. Wien : Gerold's Sohn.
- VOGT, C. Lehrbuch der Geologie und Petrefactenkunde. 2. Band, 2. Lieferung. Braunschweig : Vieweg.
- WEDL, C. Histologische Mittheilungen. Wien : Gerold's Sohn.

Philology.

The Philoctetes and the Trachiniae of Sophocles. By F. H. M. Blaydes. Williams and Norgate, 1870-1871.

Sophocles: the Plays and Fragments. Edited by Lewis Campbell. Vol. I. Clarendon Press Series, 1871.

MR. BLAYDES' *Sophocles* is one of the class of books that is not pleasant either to read or to characterise when read. With as much conscientious labour as has been spent upon it—or with at most two hours more, to correct several errors of the class intermediate between misprints and careless writing—a competent scholar could have produced a good critical edition of Sophocles, with neat and clear exegetical notes where wanted. If Mr. Blaydes has not done so, it has been for want of knowing what a good critical edition is, not for want of zealous effort to produce one. His notions of the limits of conjectural emendation are very wide—so far, he has a right to his opinion, though other scholars might differ from it. But he has personally collated several MSS. for his edition, and he would not be self-condemned if he had merely come to the conclusion that the MSS. of Sophocles are of so little authority as to leave a wide range of licence: his real fault is that, conceding him as much licence as he will, he has no notion of the direction in which to employ it.

A probable conjecture will account for the reading found in the corrupt text: but Mr. Blaydes' conjectures hardly ever even attempt to do so. In spite of his inspection of several MSS., he has never learnt what constitutes a *facilius lectio*: and as to the other familiar canon, that one should prefer the reading *cujus difficilior interpretatio*, he not only ignores it, but reverses it. If a passage is hard, it is corrupt: any group of words that will make it easy, and that will fill up its place in the metre, is, in his view, a probable conjecture. Peculiar as such principles of criticism are, and inapplicable to the text of any writer, they are especially unhappy when applied to that of Sophocles. For anyone who knows Sophocles well will confess that he is a very difficult writer, and that many of his difficulties arise from idiosyncrasies or refinements of diction: in consequence, an editor who sets to work to sweep away all such difficulties is convicted, *prima facie*, of ignorance of his author:—nor in the present case does a detailed examination do much to set the conviction aside. At any rate, it is safe to say that, if Sophocles had written the simple things Mr. Blaydes makes him write, the dullest and sleepiest of mediaeval scribes would never have written anything else, and least of all what we actually read.

Three instances may suffice, taken from a few pages of the later and perhaps the better of Mr. Blaydes' books, to show how recklessly he indulges in conjecture, sometimes as the readiest way of escape from the slightest difficulty, sometimes, it seems, from mere gaiety of heart. On *Trachin.* 667—

κακὸν μέγ' ἐκπράξας ἀπ' ἀπίδος καλῆς,

it was perhaps worth an editor's while to prove, by a few illustrative quotations, that *ἐκπράσων* in the Tragedians often means no more than "accomplish"; though the fact could be ascertained from a lexicon, even if he had omitted it. At any rate, Mr. Blaydes does quote two passages from Sophocles and three from Aeschylus to prove it, and one would suppose no more was wanted. But he cannot keep his red chalk pencil from correcting Sophocles, as though he were touching up a schoolboy's lambics: he begins his note, "Perhaps μέγα ρέχασ;" and then goes on to show how needless the conjecture is, by illustrations of the vulgate.

Ibid. 672, he gives one or two illustrations (and here at least illustrations are not superfluous) of the construction οὐον τὴν φράσω . . . θαῦμ' ἀνέλπιστον μαθεῖν: and then concludes his note, "Qu. οὐον τὴν φράσω": and this he actually puts into the text, heedless of the objection to the long syllable before the cretic; though both here and very often he leaves the vulgate to stand as the heading of the note, when he has introduced in the text an alteration, absurd or otherwise; a practice sufficiently confusing to the reader.

Lastly, in v. 718 of the same play, we have the perfectly simple words πῶς οὐκ ἀλεῖ καὶ τόνδε. On this occurs this note: "καὶ τόνδε] 'Also him?' Hercules. Qu. μὸν ἄνδρα."

From the *Philoctetes* it will be enough to cite one choice bit of comparative philology: "From the Greek σάλος comes our English 'swell'."

At the same time, a man who tries every possible conjecture must sometimes hit upon a right one. In the preface to the *Trachiniae*, we are told that the editor, on arriving at *Antig.* 1037 (for he threatens to do the whole of Sophocles), "was struck first with the singularity of the use of the preposition πρὸς, and then with the gender of the noun ἥλεκτρον, which should be neuter. This led me at once to the obvious correction τὰπὸ Σάρδεων ἥλεκτρον, which I found amply confirmed by the reading, hitherto neglected, of L., τα (supr. ὡν, a. m. pr.) προσάρδεων." This suggestion seems really probable, and though another, which follows on the next page, πῶς οὐκ ἔσται 'λυκῶν—"What Helicon?" (for λυκῆ, O. T. 420), is in Mr. Blaydes' wildest manner, we may hope that the work will improve as it goes on. It is perhaps as well that the two least interesting plays have been selected for these unhappy experiments.

It is also not to be regretted that Professor Campbell has begun, according to the common order, with the three great Oedipodean tragedies. His edition is one which no one can read without finding his knowledge of Sophocles substantially increased; and this is as high a success as can be expected by an editor or demanded from him, even without his readers being satisfied in all points with the execution, or still less able to agree with him in all details of opinion.

The first point in approaching Sophocles that will demand the study either of a tasteful reader or a judicious editor is, no doubt, the marked character of the poet's style. Anyone who claims to know him at all must have a sense of this character, sound even if rather vague: but most readers of the poet probably think it too subtle and too complicated for its features to be classified on a grammatical basis. This task, however, Professor Campbell has undertaken, in his Introductory Essay on the Language of Sophocles; and it is

here perhaps that the highest merit of the present volume lies. With so many-sided a subject to treat of, it is scarcely possible that any treatment can be quite exhaustive; but to detect omissions in the work would require at least as thorough study as the writer's own, and it is scarcely possible to find fault with the lucid and symmetrical arrangement. One slight defect of execution, however, must be noticed: Professor Campbell undertakes, very properly, to indicate by the letters *lyr.* when a phrase cited comes from a lyric passage: now this mark is several times accidentally omitted.

As to textual criticism, this edition is rather conservative in its general character: which is certainly a relief after the vagaries of Mr. Blaydes, and seems judiciously supported by argument. At the end of the Introductory Essay are a few remarks on "the Peculiarities of Language in Sophocles considered with reference to the settlement of the Text," among which we have this: "We are often justified in saying, Sophocles may have written what we find: he cannot have written what is proposed instead. It has not the Sophoclean colouring; it is like a raw touch on a picture ill restored." But it is of course impossible to quote in detail the treatment of all the corrupt or doubtful passages of the three plays; and with less than this it is scarcely possible to give more than a general statement on the views of a competent editor, applying acknowledged critical principles. It may be noticed that the critical notes are wisely kept separate from the exegetical: and that in the former the connecting words (between the symbols of MSS.) are in English, not Latin.

With the exegetical notes there is one fault to be found: they are too short. They are written too much from the editor's point of view, too little from the reader's. They take for granted a knowledge of the history of the passage commented on, and, to anyone not familiar with that history, and not knowing the various views that have been held, so as to recognise a mere allusion to them, they scarcely amount to a clear and complete statement, first of what the editor thinks it may mean, and then of what he thinks it does. Now it is not required of a first-class editor that he shall write a school-book, suited to the capacity of a student reading Sophocles for the first time: but an edition is less useful than it might be when it requires or presupposes the use of half a dozen others, some of them less valuable than itself.

One other censure it may be allowed to pass upon the book. No one could produce a good edition of Sophocles without possessing a good and sound taste, and Professor Campbell is not destitute of so essential a requisite: but there are a few points, both in the introductions and in the notes, where it may be doubted whether either Sophocles or his commentators have been duly appreciated. The appendix to the introduction to the *Oedipus Tyrannus*, "on the so-called Irony of Sophocles," really amounts to no more than this—"Irony, if understood to imply mockery, is not a proper name for it." This was perhaps just worth saying: but in saying it, the editor seems to deny that it is a real and marked characteristic of the poet. He quotes the alleged instances of it, quotes similar instances from Shakespeare and Tennyson, and then says, "Is this irony or pathos?" But surely it is a form of pathos so distinct from others as to deserve a separate name: if the received name is not the best possible, give us a better, but do not throw doubt on the existence of the thing.

On the *Antigone*, there are some judicious remarks as to the sophistical element which mingles in it with the tragical: but it hardly appears as though the relation had been adequately grasped, either between these two elements, or

between the main current of classical sentiment, and the thin vein of romantic passion and play of character that mingles with it. Professor Campbell is not the first editor who assigns v. 572 to Antigone; but he sees that the difficulty of the passage is not cleared up by that single alteration, so that he gives 574 and 576 to the chorus. This, it is true, extenuates the technical objection to the three actors all entering into conversation, and interrupting each other, in the course of a stichomythia, and this in an early play: but, if one may venture an assertion in so delicate a matter of feeling, the *Antigone* of Sophocles would scarcely have said Ω φίλαρθ Αἰμον to his face, and would have been quite incapable of such an apostrophe in presence of an unsympathising audience. The speech just suits the warm-hearted and impulsive Ismene: her kindly feeling towards her cousin and prospective brother-in-law may surely account for the fact that "there is greater bitterness in this line than in any other speech of hers." No doubt ῥὸ σὸν λέγος in the next line is a difficulty: "the marriage you prize of" is not a very satisfactory explanation, and to make Creon address Antigone if she has not spoken is harsh; but anything is better than to make her speak. Can the words imply a threat to Ismene, πολλὴν μν χρόνον παρθενεύσει? Creon was quite capable of saying, "Don't trouble about your sister's husband: I shall have enough trouble in finding you one."

In the same play, v. 751, the note begins "τινὰ] i.e. σέ:" and this view is supported by argument as "the obvious meaning." Now, in vv. 1231 *sqq.*, it is no doubt right to reject the far-fetched view, that Haemon's motive in drawing his sword was misunderstood: but from his mad act, in presence of the very corpse of his love; and followed even then by immediate repentance, it surely cannot be inferred that he would threaten his father's life deliberately—rather the reverse. Creon no doubt so understands him: but he is in at least as high a passion as his son, and of a more suspicious nature.

The lines 905 *sqq.* are rightly defended from spuriousness, though not from bad taste; but instead of the editor saying simply that the story of the wife of Intaphernes must have become popular in Ionia, because it is "a precarious supposition" that it was derived by one author from the other, one would have liked a reference to *O. C.* 337 *sqq.*, both as a proof that Sophocles was not incapable of an impertinence, and as increasing the likelihood that Herodotus was the direct source of both impertinences. In the latter passage the pedantry is even more gratuitous, though the sentiment is less offensive.

It is ungracious to part with expressions of dissent from a book deserving so much respect: for respect is just the word for the feeling raised by the study of so thorough and honest an edition. So it may be noticed that Professor Campbell seems to clear up one apparent obscurity in the story of the same play, viz. how Haemon got into the vault before Creon, yet not in time to rescue Antigone. He sees a hint at this in the word λαθοσπάδη in v. 1216: "In preparing the vault, an opening had been left through which the victim was thrust into the chamber. This opening was then roughly closed with stones. Through there Haemon had passionately torn his way. And the cleft so made by him is the ἀρμὸς χώμυτος λαθοσπάδης." W. H. SIMCOX.

The Bacchae of Euripides, with a Revision of the Text and a Commentary by R. Y. Tyrrell, M.A., Fellow and Tutor of Trinity College, Dublin. Longmans.

For interest and importance the *Bacchae* confessedly holds a high place among the extant tragedies of its author. Even Macaulay, in spite of his general depreciation of Euripides,

admitted the transcendent merit of this particular tragedy. The free and flowing, but sometimes inaccurate, translation of Milman has made it accessible to the English reader; and the special editions of Elmsley, Hermann, and Schöne, have contributed largely to its criticism and elucidation.

Mr. Tyrrell's admirable Greek verses in the *Hesperidum Susurri* have already shown that he has one at least of the qualifications required in an editor of a Greek tragedian. His introduction, which includes a disquisition on the religious and moral import of the play, combating the common view that it is a recantation of rationalism, strikes us as the best part of his work, whereas the general excellence of his commentary is impaired by a slight unevenness of execution, while his recension of the text, though often ingenious, is sometimes open to grave objections. It will be convenient to limit ourselves to a notice of some of the points in which Mr. Tyrrell's text differs from the ordinary editions. At line 23 we find a distinct improvement in the transfer of line 54—μορφὴν τὸ ἐμῆν μετέβαλον εἰς ἄνδρος φύων—from a place where it either is otiose or, at the very best, only helps out the slight ambiguity of the previous line. The passage now runs thus:—κάκει χορεύσας καὶ καταστήσας ἡμὰς τελεῖας, ὦ εἶη ἐμφανῆς δαίμων βροτοῖς, μορφὴν ἐμῆν μετέβαλον κ. τ. λ. This happy alteration is due to Mr. Allen, who is also to be credited with the restoration—στεφάνωσέν τε δρακόντων στεφάνους, ἔθεν ἄγρων θηρότροφον μανάδες ἀμφιβάλλονται πλοκάμους (where the Palatine MS. has θηροτρόφοι; the Laurentian θυρόσφοροι, which is the common reading).

In line 25 his text is less satisfactory. The passage is generally printed thus:—πρώτας δὲ Θήβας . . . ἀνωλόνεξ, νεβρῶς ἔξαίας χροὺς, θύρον τε δοὺς εἰς χέιρα, κίσσινον βέλος. Both the MSS. have μέλος, while βέλος is due to Henry Stephens, who asserted (falsely, it is alleged) that he found it in his "Italian MSS." We are willing to consider the word as, at the best, a conjecture only; but even then, we cannot help accepting it as a true restoration of the original text. Mr. Tyrrell, however, prints Κίσσινον μέλος ἀνωλόνεξ: the verb is thus made to govern Θήβας and μέλος, the intervening words being parenthetical. Now, firstly, the construction thus gained is harsh; secondly, there is no ground for our annotator's assumption that the Kissian minstrels of Susa, "though generally spoken of as mourners, no doubt sang all kinds of orgiastic strains;" and lastly, beyond the general fact of Dionysus' having passed through Persia, there is no proof alleged of any connection whatever between him and the Kissians in particular. On the other hand, our editor's arguments against βέλος fail to convince us: his first allegation is that Euripides never applies βέλος to a *thyrsus*; this we admit, but we are defending not the application of βέλος to the *thyrsus* but rather the full phrase κίσσινον βέλος, where the epithet may be regarded as one of the well-known "limiting" epithets, of which πτυχὸς κίνη is an exaggerated instance. The descriptive touch is most natural when we remember that the *thyrsus* is here mentioned for the first time in the play (and, indeed, for the first time in extant Greek literature). Further, line 733, θύροις ὁ πλισμόναι shows that the poet regarded it as a weapon or missile; and lastly, in the *Dionysiaca* of Nonnus (the authority of which will be admitted by Mr. Tyrrell, who is as fond as Hermann of quoting it) we find, in the 43rd book alone, κισσοφόροις βελέμνοις, κισσήνες ἔχοις, θύροις ἀκοντιστήρ, and χεριόνα θύροις ἔστας δίζεο σοι βέλος ἄλλο. When Mr. Tyrrell tells us twice over that θύροις is expressly distinguished from βέλος in line 761, he forgets to notice that the contrast in that passage lies between θύροις and λογχωτὸν βέλος.

At line 854 we have ἀρ' ἐν παννυχίοις χοροῖς θήσω ποτὲ λευκὸν πόδα ἀναβαχεύοντα, δορὰν εἰς αἰθέρα δροσερὸν ρίπ-

τονσ' ὡς νεβρὸς κ. τ. λ. The note runs thus:—"I read δορὰν" [for the MS. reading δέραν] "*the bacchanal fawn skin.* ρίπτεν cannot well be applied to the neck." To this we reply that Euripides never uses δορὰ as equivalent to νεβρὸς, but (when νεβρὸς itself is not used) always prefers a periphrasis, e. g. καταστικοὶ δοραὶ, νεβρῶν δοραὶ, νεβρῶν παμπούκλοι στολῶν. Next, ρίπτεν can be applied to the neck, for Pindar has the phrase ρίψασθε σὺν κλόνῳ. Lastly, it is awkward, if not ludicrous, for the chorus in the same breath to compare itself to a fawn and to speak of "tossing the fawn skin into the dewy air."

In line 986, Kirchoff and Mr. Tyrrell independently propose ὄρδρόμων for ὄριοδρόμων. The latter states apologetically that ὄρδρόμων "has the analogy of ὄριβαχος and ὄριβάτης." He might have added ὄρικτυπος and ὄριπλανος, or, better still, have told us that the word, so far from being a vague and shadowy conjecture, has a real existence (in Nonnus, *Dion.* 5, 229), although Liddell and Scott do not happen to say so.

The limits of this notice prevent our discussion of other points of textual criticism (not to mention exegesis) suggested by Mr. Tyrrell's book; but we cannot lay it down without commending it to scholars as an interesting addition to the literature of the subject.

J. EDWIN SANDYS.

Stamm's *Ulfilas*, neu herausgegeben von M. Heyne. Fünfte Auflage. Paderborn: Schöningh.

THIS work has received so many improvements and additions from its latest editor, Dr. Moritz Heyne, that it has in its present shape little more than the title in common with the first edition of 1853. In the first place the text has undergone a thorough revision, based on the results of Uppström's labours, whose accurate study of the difficult Gothic MSS.—most of them palimpsests—enabled him to introduce many hundred corrections into the received text. The fact that all of these corrections have been incorporated into the text of the present edition alone gives a high value to the work for advanced scholars no less than beginners, for whom it is mainly intended. The interests of the critical student of Gothic are also consulted in the various readings of the Milan MSS. and the marginal glosses of the *Codex Argenteus*, given at the foot of each page. The text is followed by a full, though, of course, not exhaustive, glossary, and a grammar, comprising phonology, flexion, and syntax, of which the two first sections have in the present edition been entirely recast, and brought up to the present state of Teutonic philology; the syntax, however, has been left in its original form, which, although brief, is clear and accurate, and gives all that can be required by the majority of students. The glossary is followed by a very useful appendix—a list of over fifty words, which in consequence of Uppström's corrections will have to be expunged from the dictionaries. The latest addition to the Phonology is Westphal's important "Auslautgesetz," of which Dr. Heyne gives a brief abstract.

The only fault to be found with the book is the omission of the Vienna runnes and the Gothic distich, which, although corrupt and of comparatively small value, ought to have been added for convenience of reference.

After looking through such a work as this—so unpretentious in form, so thoroughly scientific in execution—we cannot help thinking that the high character of German philology is mainly attributable to the excellence of the textbooks it puts into the hands of beginners, who are thus trained to a methodical and intelligent habit of study from the very outset.

HENRY SWEET.

Pantchatantra; ou, Les Cinque Livres, recueil d'apologues et de contes, traduit du sanscrit par Edouard Lancereau, membre de la Société asiatique. Paris, 1871.

PROFESSOR BENFEY, in the introduction to his translation of the *Panchatantra*, has so exhaustively treated the literature of this remarkable Sanskrit book that he has left but a few scattered gleanings for those who succeed him. Every story is there carefully traced through its various subsequent forms; and his translation, though based on Kosegarten's edition, has corrected its not unfrequent errors by a collation of new MSS. Still his valuable book is hardly adapted for the general reader. Its very fulness makes it rather wearisome; and M. Lancereau has done good service in giving us its general results in a compact and readily available form. His preface gives a short sketch of the various versions and imitations which gradually naturalised these old apologetics in every literature; and in his notes to his translation he adds brief references to the different books, where the reader will find a reproduction of each several story, and many of these references are added from his own reading. His translation is accurate; and the whole volume will be of great service to any one who wishes to trace the literary history of any particular apologue.

The only fault which we have to find with the book is that M. Lancereau has confined himself too much to the "Einführung." Thus he has omitted to take advantage of the additions which were given by Prof. Benfey and some of his contributors in the *Orient und Occident*, and he never refers to the former's reviews in the *Ausland* for 1858 and 1859. Benfey has there shown (cf. *O. u. O.* ii. 169) that with regard to the cycle of stories in the *Panchatantra* and other similar collections there are three distinct "moments" in the history of their transmission. Their origin is generally Buddhist, and it is in Buddhist books that we are in most cases to look for their oldest forms; they were thence adapted by the Brahmins and incorporated in their Sanskrit literature; and it is from these Indian adaptations that they have spread westward over Europe. M. Lancereau omits all notice of these points, and treats the *Panchatantra* too often as the original source, and not as merely one of the incidental stages of transmission.

In the third volume of *Orient und Occident*, there was a very interesting paper by Benfey, and another by Bastian, on the Siamese version of the *Panchatantra*, the *Nonthuk Pakkaranam*, i. e. *Nandaka-prakaranam*, or the history of the bull Nandaka, which is a version of the first two books of the Hindu collection;—only there it is the merchant's bull Sanjivaka which is left in the forest, and Nandaka continues the journey with his master, while in the Siamese version the names are reversed. Benfey remarks: "diese siamesische Bearbeitung des *Panchatantra* wird wahrscheinlich auf die Geschichte dieses Werks ein neues Licht werfen, und es ist sehr zu wünschen, dass Hr. Dr. Bastian sie vollständig veröffentlichte." No reference to this version is to be found in M. Lancereau's notes. Dr. Bastian in his paper gives a translation of the Siamese version of "The Sandpiper and the Sea" (Lancereau, i. 13), "The Grateful Beasts and the Ungrateful Man" (the second fable in Benfey's appendix to the first book, from the Berlin MS.), "The Wicked Tiger" (which is partly connected with the fourth fable of the fifth book), "The Ape and the Sparrow" (Lancereau, i. 18, 19), and "The Foolish Friend" (Benfey's appendix to the first book, story 12). With regard to the eighteenth and nineteenth fables of the first book, "Les Singes et l'Oiseau," and "Le Passereau et le Singe," M. Lancereau has himself remarked that the latter fable "n'est qu'une seconde forme de la précédente;" and Benfey had conjectured in his introduction, p. 271, that it was a later

interpolation, as it is omitted in *Somadeva* and the Arabic version, and is transferred in several of the MSS. to the fourth book, just as it is inserted in the *Hitopadesa* in the third. It is also omitted in the Siamese version, and Benfey remarks in a note: "die von mir an dieser Stelle ausgesprochene Vermuthung findet in der vorliegenden Mittheilung ihre Bestätigung." The Siamese fables frequently differ widely from their Sanskrit form, but their variations are often of great interest.

M. Lancereau had probably finished his work before the publication of Prof. Benfey's letter in the *Academy* for August 1 (vol. ii. p. 387), or he would no doubt have alluded to the important Syriac translation of *Kalilah and Dimnah*, so fortunately discovered by Prof. Bicknell, in August 1870, in the episcopal library at Māridīn. We await the publication of this invaluable MS. with the liveliest interest. If, as Prof. Benfey hopes in his letter, we should be able by its means "completely to restore the Sanskrit form of the original in all essential points," it would throw a ray of light on the history of these apologetics at the very point where it is most enveloped in obscurity.

E. B. COWELL.

DISCOVERY OF THE OLDEST REVISION OF THE PANCHATANTRA.

TO THE EDITOR OF THE ACADEMY.

SIR,—You were good enough to insert in one of the numbers of your journal for last August (vol. ii. p. 387) a notice of the discovery of the Syriac version of the Indian original, the first five sections of which have been preserved in Indian literature under the name of the *Panchatantra*. May I ask you to accord a place in your widely circulated journal to the following account of another discovery scarcely, if at all, inferior in interest to the preceding.

In my work on the *Panchatantra* (vol. i. p. 5, and preface, pp. xviii, xix) I called attention to the importance of the southern recension of that collection, and remarked that the variations of this from the older recension, as preserved to us in the effluents of the Pehlevi translation (sixth century A.D.), are, comparatively speaking, excessively slight, and that therefore the very considerable transformations which the MSS. of the *Panchatantra* hitherto known exhibit must have taken place posterior to the date of the southern recension.

This view was founded in the main upon Dubois' translation of the *Panchatantra* (*Le Panchatantra ou les cinq ruses. Fables du Brahme Vichnou Sarma &c.* Paris, 1826), but owing to the character of this translation (cf. vol. i. p. 5, of my work) could not be raised to the rank of a certainty.

Through the kindness of Mr. A. Burnell, who has rendered such eminent services in the collection and investigation of Sanskrit MSS. and works, I have been put in possession, a few days since, of a MS. of the southern recension, which in the fullest manner confirms the view which I had ventured to express.

In the fables and tales, this recension agrees perfectly—with a few quite insignificant exceptions—with the Arabic version, and makes it not improbable that it assumed the form which it exhibits in the MS. before me, not very long after the Sanskrit original came to Persia.

In the first book, it contains but one story which is not to be found in the Syriac and Arabic texts; and one fable is transposed. In both cases it agrees with the *Hitopadesa*, the close affinity of which to this southern recension I have called attention to in more than one passage of my book. But the agreement of the *Hitopadesa* with the MS. before me is far greater than I could have suspected with the materials then at my disposal. Apart from the changes which the editor of the *Hitopadesa* has permitted himself to introduce, he seems to have taken mainly this southern recension as his basis, and in this way we obtain a new piece of evidence for the determination of the date at which the latter must already have existed. The publication by Aufrecht of Ujjvaladatta's commentary on the *Unḍi-Sūtras*, which mention the *Hitopadesa*, has proved beyond a doubt that the latter is older than the time of Ujjvaladatta (twelfth-fifteenth century A.D.); and hence it follows that the recension of the southern *Panchatantra* which forms its basis is older still. If this be true, the date of this

recension would fall between the sixth and about the twelfth century of our era.

To turn to the second and fourth books : the MS. before me agrees in every particular as to the stories with the Arabic text. The third book shows a variation, which it again shares with the *Histopadesa*. A further variation from the Syraic and Arabic texts agrees with the other recensions of the *Panchatantra* known to me. This together with another variation in the fifth book form, so to say, the link which serves to unite the southern recension, which we must regard as the oldest, with the other and later versions.

It is not necessary to trace these relations further in detail at present, as the introduction to the edition of the Syriac version, which we hope soon to be able to publish, will explain the whole matter fully. At the same time it is not unlikely that either the writer of these lines or some other scholar in this field may be able to publish an edition of this oldest, and undoubtedly most important, recension of the *Panchatantra*.

Göttingen, March 16, 1872.

TH. BENFEY.

RESEARCHES IN TANJORE.

TO THE EDITOR OF THE ACADEMY.

SIR,—Since my last letter I have made several discoveries in the Palace Library here. Among MSS. of Sanskrit books already known I have found two *Grantha* copies of the rare *Harshacarita*; one of these contains only the beginning, the other ends abruptly with a short 8th chapter like the MS. described by Dr. Hall (*Vāsavadattā*, pref. p. 53); it therefore is likely that this curious romance was never finished. Both MSS. begin with the second half of the second verse quoted by Dr. Hall; they are old for palm-leaf MSS. (seventeenth century), and are very correct.

In the same place I have found a palm-leaf MS. of the hitherto unknown medical treatise, the *Bhela Saṁhitā*, which closely resembles the *Caraka-S.* This MS. has been copied from a defective original, but what is left of this ancient* treatise is very interesting.

There are in the same library many new lexicographical works, some of which are attributed to *Harsha*, *Bāga*, and other well-known writers. They mostly seem of little value, and of doubtful authenticity. There is however a *Bhōja nighantu* (*Nāmamālikā*), which is most likely the real Kosha referred to (I cannot say quoted) by later commentators. It contains in three sections and about 320 *slokas* synonymous names for the gods (*Indra*, *Agni*, *Varuṇa*, *Siva*, &c.), and their belongings, for celestial and for terrestrial objects. The MS. (which is in the Telugu character) is far from correct.

The names of the early dramatists mentioned in the *Mālavikāgnimitra* are given in *Kājavema's* Commentary (also in the same library), as *Bhāsa*, *Saumilla*, and *Kavīputra*, or *Bhāsa*, *Kavīputra*, and *Saumilla*.

Elsewhere I have found MSS. of the *Vaihānasa pravarakhāṇḍa*, and of *Sāyaṇa's* commentaries on the smaller *bṛahmāṇas* of the *Sāma-veda*.

When my edition of the *Sāmavidhāya* (which has long been nearly printed) is finished, I hope to undertake editions of the *Ārṣeya* and *Devatādhyāya bṛahmāṇas*.

The Madras government has directed me to examine a large collection of copies of inscriptions in the Telugu country; I hope to find some historical facts in them. The inscriptions of S. India seldom give any other date than the year of the king's reign; but as they exist in countless numbers, and often refer to contemporary kings of other parts of India, it must be often possible to restore the real dates. Sir W. Elliott has done this already in several cases, and with important results.

The most serious impediment to progress in this way arises from the numbers and size of the inscriptions. The one round the shrine of the great Siva temple in this place covers about half an acre of wall; it records donations by a king named *Kēppā Kesari Varman*, a name quite unknown to local tradition, and another good proof of the entire worthlessness of the local legends (*Māhātmya*).

You will have seen already the first numbers of the Indian Antiquary, edited by Mr. Burgess. Dr. Jaeschke has finished the first part (120 pp.) of his great Tibetan Dictionary. Dr. Gundert's admirable Malayalam Dictionary will be finished in the course of a year, and then it is to be hoped that a real Tamil Dictionary may be undertaken by some competent scholar. Mr. C. P. Brown's Telugu Dictionary leaves

nothing to be desired. I have happily been successful in my endeavours to induce the learned Basel missionaries to bring out a Tulu Grammar. This interesting Dravidian dialect, which must soon become extinct, is of the greatest importance for Dravidian comparative philology. This grammar is already in the press. It will include a select vocabulary.

Tanjore, Feb. 29, 1872.

A. BURNELL.

Contents of the Journals.

Hermes, vol. vi. pt. 3.—M. Haupt : *Coniectanca*. [Emendations of places in Plutarch's *Morals* and the *Metamorphoses* of Apuleius.]—A. Luchs : On Plautus. [On the scanning of *nescio*, with remarks on the text of sundry passages.]—W. Dittenberger : Roman names in Greek Inscriptions and Literature. [The present article is principally on the Greek mode of representing the Latin *u* and *v*. The writer maintains that *o = u* is older than *ov = u*, discusses the instances in which *u* is represented by the Greek *v* or *e*, and enumerates the equivalents of *qu*. The consonant *v*, when not entirely omitted, as in *Βελλαι*, is shown to be expressed by either *ov* or *β*, *β* being, during the imperial period, pretty common, though it never entirely supplanted the older equivalent : the occasional use of the diphthongs *av*, *ev*, *ov*, for the Latin *av*, *ev*, *ov*, is explained as due to the gradual approximation of Greek pronunciation to the modern usage. This highly interesting essay concludes with some remarks on the Greek representatives of the Latin *ns*, and on the tendency to assimilate Latin names to familiar Greek words.]—H. Jordan : The *Templum Deae Syriæ at Rome*.—Th. Mommsen : Fragments of *Johannes of Antioch* and *Johannes Malalas*. [The Greek text with an important historical commentary.]

Revue Critique, March 2.—The philological articles in this number are reviews (anonymous) of Uricoechea's *Grammatica de la lengua chibcha* and Haag's *Vergleichung des Prakrit mit den romanischen Sprachen*; the former work receives very high commendation.—March 9.—“X.” notices L. Dindorf's *Historici Graeci Minores*, and “P. M.” (= Paul Meyer) *The Theory and Practice of Creole Grammar*, by J. J. Thomas, whose labours here find a competent and at the same time most appreciative critic.—March 16.—E. Tournier, in a careful article on W. Dindorf's *Lexicon Sophocleum*, pronounces the book to be an improvement on Ellendt, and less indebted to him than might be supposed; pointing out, however, marks of haste, and also omissions which give the work the air of being a *plaideoyer* in favour of Dindorf's edition of Sophocles.—The number concludes with a notice, by E. Sayous, of Ujfalvy's *Langue magyare*, Budenz's *Ugrische Sprachstudien*, and *Die finnisch-ungarischen Sprachen und die Urheimat des Menschengeschlechtes*, by D. E. D. Europaeus.

Zeitschrift der d. morgenl. Gesellschaft, vol. xxv. No. 4.—Linguistic studies in ancient Arabic, by Dr. Blau, part i. [On the original form and prevalence of the article.]—Extracts from Dschāmi's Love-poems, by Fr. Rückert [continued].—Report on a collection of Indian coins, by W. Pertsch.—Semitic loan-words in Egyptian, by Dr. Lauth. [Cook's essay in Murray's *New Bible Commentary*, vol. i., should have been mentioned.]—The physician's song, *Rigveda*, x. 97, by R. Roth.—On the antiquity of the Cassel MS. of the Bible (Kenn. 157), by Dr. Zunz.—Extract from letters of Dr. Prym and Dr. Kiepert.—Biographical notices: *Bibliotheca Indica*, 1865–1870, rev. by A. W. Tegner, *De vocibus primae declinationis Wearumque declinatione*, by Nöldeke.—Wright's *Apocryphal Acts of the Apostles*, also by Nöldeke.—Stade, *Über den Ursprung der mehrlautigen Thatwörter der Geesprache*, by L. K.

Journal Asiatique, No. 67.—Extracts from the Paritta, texts and commentaries in Pali, by M. Grimalot, with introduction, translation, notes, and notices by M. Léon Feer.—Royal chronicle of Cambodge, by M. Fr. Garnier.—Memoir on the ancient history of Japan, according to the *Wen-hien-tong kao* of Ma-touan-lin, by M. d'Hervey de Saint-Denys.—De Goeje's *Bibliotheca geographorum arabicorum*, rev. by M. Barbier de Meynard.—Assyrian tablets, translated by M. Oppert. [Papers and translations epitomised by Menant. Valuable astronomical identifications. A mistake in the first translation, through not noticing a tablet in Inscr. iii. 55. Anu and Bel are names given to the moon from the 1st to the 5th day, and from the 10th to the 15th; consequently the rendering “in the hour of Anu” and “Bel” must be amended.]—Paspati's *Etudes sur les Tchingians*, &c., by M. Belin.

ERRATA IN NO. 44.

- Page 107 (δ), line 33, for “general” read “gradual.”
- “ “ δ), line 59, for “pompéinne” read “pompéienne.”
- “ “ 108 (δ), line 66, for “Polter” read “Potter.”
- “ “ 111 (δ), line 21, for Lat. $70^{\circ} 40'$ read Lat. $73^{\circ} 40'$.
- “ “ 117 (δ), line 27, for “imitated the Talmud of Jerusalem” read “imitated the Talmud of Babylon.”
- “ “ 118 (α), line 26, for “thrice” read “twice.”

* It is mentioned by the *Caraka-S.* as one of the authentic medical *Saṁhitās*.

THE ACADEMY.

"INTER SILVAS ACADEMI QUAREM VERUM."

VOL. III.—NO. 46.

Readers are reminded that the mention of New Books, Articles, &c., in our lists is intended as a guarantee of their importance. The Editor of THE ACADEMY cannot undertake to return communications which are not asked for. The next number will be published on Wednesday, May 1, and Advertisements should be sent in by April 27.

General Literature.

Lord Byron. Von Karl Elze. Berlin : Oppenheim, 1870.
Lord Byron : a Biography, with a Critical Essay on his Place in Literature. By Karl Elze. Translated with the Author's sanction, and edited with Notes. John Murray, 1872.

THIS German biography of Byron with its English translation appear in England at an appropriate time. Moore's *Life* of the poet, first published in 1830, is now just ceasing to be copyright, and we may expect to see it shortly in a variety of cheap forms. It had remained as yet the only English biography of Byron having a certain completeness of scale and execution, and an authoritative character. It is richly laden—but, in its quality of biography *ab extra*, overloaded—with Byron's own letters and memoranda. These, first-rate of their kind, might very well be now separated from Moore's connecting and sometimes interfering narrative, and re-issued compendiously for general perusal. Moore's proper handiwork would then remain to speak for itself; and, whatever its merits of intention and performance, would certainly not satisfy all the demands of a Byronic student of the present day; and meanwhile the allegations put forth by Mrs. Stowe have deflected the centre of gravity of all materials relating to Byron, and require to be assessed, and, so far as yet possible, disposed of.

Professor Elze has produced a very readable narrative, of just about the right size: it is not lengthy, nor yet curt, but sets forth the remarkable and interesting career of Byron on a scale commensurate with the greatness of the poet. Of Byron's own writing, in the way of letters or memoranda, there is hardly a trace here, so that no biography could in this respect be more diverse from Moore's. The German professor shows a familiar current acquaintance, not only with that book, but with Byronic memoirs and materials in general. This indeed is no more than might have been fairly expected from a writer so well-read in English literature: the preface of his translator refers to previous works in which Professor Elze has proved his knowledge in this line—a *Selection from the British Poets*, *Reminiscences of a Tour through England and Scotland*, a critical edition of *Hamlet*, editorship of the *Year-book of the German Shakespearean Society*, a *Life of Walter Scott*. The last-named writer seems to share with Byron, to an extent scarcely warranted, the admiration of the professor, who speaks of Shakespeare, Milton, Byron, and Scott, as "four poets of unsurpassed genius"—reckoning in, however, the prose romances of Sir Walter as a part of his poetic performance. The final chapter is "On Byron's Place in Literature," and shows an amplitude of scope such as we expect from a critical-minded German. The remarks on Byron as the creator in literature of that great factor in modern thought which is termed "*Weltschmerz*" are remarkably sound and telling:

VOL. III.—NO. 46.

and it is curious for the English reader to be informed, though probably not far from the truth, that, amid the immense influence that Byron's poems have had all over Europe, the country in which they have produced least effect is England itself. In other respects this estimate of Byron's poetry is capable and pointed, without, perhaps, advancing anything that is very novel, or that transcends in keenness other studies from competent hands. Preceding this chapter is another on "Characteristics of Byron," holding a very even balance between the good personal qualities and the bad—such, for instance, as generosity and stinginess: Professor Elze is ready to believe in the first, without denying or dissipating the evidence in support of the second. Nevertheless it may be that, as regards the main typical image of Byron which the author has before his mind's eye, he is somewhat too much disposed to reject *a priori* such allegations as would tend to disfigure or remould it, and to determine that so-and-so is not true because it cannot and must not be true.

Naturally, the transaction to which the biographer would be most likely to apply this questionable test of truth is the mutual relations between Byron and his half-sister, Mrs. Leigh, or what is termed "The Stowe Scandal": and I think his resolute predisposition (however unconscious of any unfairness) to scout the whole story has not failed to leave a trace amid the many points of argument, of more or less cogency, that he brings forward to refute the allegations. That he disbelieves and contests the story is of course no matter of complaint, nor yet of surprise: everybody would wish to disbelieve it, most people appear to do so, and perhaps not even Mrs. Stowe herself would venture to say that the charge is *proved*—certainly we should dissent from her if she did so. Of all direct arguments for disbelieving it—apart from its inherent or antecedent improbability, which, I fancy, along with its unpleasantness, weighs rather too much with Professor Elze—the strongest appears to be the tenor of the letters addressed by Lady Byron to Mrs. Leigh about the time of the separation; letters which have been published in the *Quarterly Review* and elsewhere, and which do undoubtedly create a strong presumption that the lady who wrote in such terms could not have believed that the sister-in-law whom she was addressing had committed incest with the writer's husband. But it is not the less true that Mrs. Stowe, in her later book named *Lady Byron Vindicated*, has grappled with this difficulty; and has suggested—regarding the dates of the letters, ascertained or surmisable, and the degree of moral responsibility which Lady Byron may probably have imputed to Mrs. Leigh at the relative dates—considerations which sensibly diminish the weight of the letters in question as telling against the Stowe narrative. Professor Elze, in the body of his work, reproduces these letters of Lady Byron, with his own comments as to their inconsistency with the charge of incest: in a note at the end of his volume (the book *Lady Byron Vindicated* having appeared meanwhile) he continues the same line of argument, but he says not a syllable of the theory advanced by Mrs. Stowe in explanation of the letters. This is hardly fair: at any rate it is not the way to convince the reader who is tolerably *au fait* with the details of the controversy. The translator pursues a still simpler plan. What Herr Elze had said about the matter in the body of the book appears in its place, but the note has wholly vanished: it is neither translated where it occurs in the original nor incorporated with the text. The translator therefore simply ignores what Mrs. Stowe had found to say in reply to the evidence adduced in confutation of her original narrative. The American lady may well opine that the silence of the German as to one of her most important points, and the

silence of the Englishman as to her entire rejoinder, are a testimonial to the strength of her position. We should have preferred a different kind of testimonial; a resolute encounter with all the arguments or inferences put forward by Mrs. Stowe, and a demonstration, if practicable, of their fallacy or feebleness. That such a demonstration may still be forthcoming, we think extremely conceivable: that it has yet been supplied, we do not consider. The nearest approach to what is wanted is to be found in the letters written by Lady Byron's solicitors, Messrs. Wharton and Fords, and by Lord Wentworth: but even these letters, giving the amplest extension to their terms, only refer the real demonstration to the documents left by Lady Byron in charge of her trustees, and as yet unpublished—perhaps never to be published.

It is observable that Professor Elze, strongly as he opposes the charge of incest, expresses his conviction that this same was the dark and shrouded accusation against Byron which his wife communicated, at the very time of the separation in January or February 1816, to her counsel, Dr. Lushington. He also brings out, with more relief perhaps than it had received hitherto, the fact that rumours to the like effect were at that same time current in society, as accounting for the separation. Indeed, that this was so can hardly be doubted by any one who reads the letter of Shelley to Byron, dated September 29, 1816, and lately printed in the *Quarterly Review*: "Kinnaird . . . informed me that Lady Byron . . . was living with your sister. I felt much pleasure from this intelligence. I consider the latter part of it as affording a decisive contradiction to the only important calumny that ever was advanced against you. On this ground, at least, it will become the world hereafter to be silent." Now, if in 1816 Lady Byron accused her husband of the incest (or of attempting incest), the charge communicated by her to Mrs. Stowe cannot have been, as some have surmised, an insane or hypochondriacal hallucination of her after years, consequent possibly upon a supposed resemblance to Byron borne by Mrs. Leigh's daughter Medora, in character or otherwise; and, if in 1816 rumours of so abnormal an offence as incest were rife in society, it is difficult to see on what this could have been founded, unless on something patent to society in the conduct of Byron or of Mrs. Leigh—for as yet Lady Byron divulged nothing save to her counsel (though Herr Elze seems to doubt this), and the poet himself had not so much as published *Manfred*, now regarded by some persons as symptomatic. The letter of Shelley above cited may, in this connection, be very heartily welcomed by the vindicators of Byron and Mrs. Leigh. Shelley had then just returned to England from some months of intimate communion with Byron: he knew *Manfred* in MS., and himself, in the following year 1817, published his poem of *Laon and Cythna*, developing the connubial passion of a brother and sister as something guiltless in its essence. That Shelley, under these conditions, should write to Byron a private letter in which the rumour in question is treated as a mere utter calumny, and a refuted calumny too, seems to be one of the strongest items of evidence yet produced on that side of the debate. Before leaving this topic, I may notice that one observation of Herr Elze has a very inconsequent air. He says: "Lady Byron . . . employs, in the above-mentioned remarks on Moore's *Life and Letters*, the following words: 'If the statement on which my legal advisers (the late Sir Samuel Romilly and Dr. Lushington) formed their opinions were false, the responsibility and the odium should rest with *me only*.' This scarcely admits of any other interpretation than that she knew the facts she had stated, not from her own personal observation, but only as communicated to her through a third person; so that

ultimately the warp of this woof may turn out to be mere feminine gossip." But why should Lady Byron's assertion of her own sole responsibility in imparting a certain onerous secret to her counsel indicate that to herself the secret had been betrayed or hinted by some one else? Surely the not unnatural inference is wholly in the contrary direction—so far as *any* inference can legitimately be formed on this collateral point.

Among other occurrences of Byron's life, one that is treated with more than common fulness and interest by Herr Elze is the poet's connection with carbonarism and revolutionary movements in Italy. His slips in matters of detail do not appear to be numerous, though every now and then some such can be discerned. The name of the mother of Allegra was not "Miss Jane Clermont" (p. 204 of the translation), but Miss Jane Clairmont, ordinarily called by her friends "Claire Clairmont." The suggestion (in which Elze himself does not, however, believe) that Byron caused Allegra to be buried in England in order that the mother might have the opportunity of visiting her grave seems to be thrown out in ignorance of the fact that Miss Clairmont was then still living in Italy, which has since continued to be her home. Herr Elze demurs to the statement that Shelley avowed himself an atheist: "dass er sich, wie erzählt wird, wirklich mit Atheismus gebrüstet hat, ist wol nicht sicher verbürgt." This is not correct: for Shelley, not to speak of graver utterances on the subject, signed his name in the visitors' album at Montanvert with the addition—

Εἰμι φιλανθρώπος δημοκράτης τ' θεός τε.

Admirers of Shelley may with pleasure see the testimony borne by our author to the great influence which the works of that transcendent poet exercised in Germany at the date of the "Young Germany" movement, when Byron also was at the acme of his fame: "let it not be forgotten," he says, "that the poetry of Shelley, at that period, interested and inflamed the youth of Germany in a hardly less degree than Byron's." There is another point connected with Shelley which is persistently mis-stated by all sorts of writers, and by Herr Elze among them, and which it may be worth while to try to rectify here. Leigh Hunt (see his *Autobiography*, p. 320, edition of 1860) gives an account of the burning of the body of Shelley in August 1822, and of the demeanour, on that occasion, of Lord Byron and himself, in which there was nothing to reprehend. He then adds, "Yet see how extremes can appear to meet," &c.; and proceeds to record his own and Byron's unseemly conduct on the same spot on some other and subsequent occasion. "On returning from one of our visits to this seashore, we dined and drank: . . . we sang, we laughed, we shouted," &c. Elze follows a multitude to do evil, and represents the riotous merriment to have ensued immediately after the cremation, "when he [Byron] drove back with Hunt through the pine-wood to Pisa."

It remains to say a few words regarding the mode in which the translation from Professor Elze's work has been executed (apparently by the same gentleman who appends the initials "R. N." to an English rendering of some German verses with which his appendix concludes). The translation is on the whole correct and fluent. Now and then, however, a sentence is lumbering, or even sometimes ungrammatical—as the statement (p. 101) that "Byron . . . laid down on the deck": and throughout the translator assumes the right of deviating from his original in detail where he thinks fit. In many instances, this is not only allowable but advantageous: he omits some item of needless particularity for the English reader, or supplies some useful emendation or addendum. But this is not always the case. For example,

on p. 171, he omits a statement made by Elze (in summarising the book *Medora Leigh*) to the effect that Lady Lovelace gave Medora a sisterly reception in Paris; on p. 174, he misses, presumably through mere squeamishness, Elze's reference to Caligula's incestuous love for his sisters, appositely inserted to explain why some one had likened Byron to Caligula. Perhaps the same feeling has induced the translator to cancel, from p. 168, Elze's observation (pertinent though it is to the serious argument here in hand) that Byron, in his various love-affairs, was more seduced than seducer: and a still less manly or creditable motive may have dictated the omission, in the same context, of the German author's denial, also wholly pertinent to his argument, of the general immorality of continental married life. This is not the sort of translating to which an author of repute like Professor Elze deserves to be subjected (though indeed it appears that he saw the English version as it was passing through the press), nor by which reasonable British readers would wish to judge the work of a foreign admirer of one of their great poets.

I may add that the characteristic words of one of Byron's least refined mistresses—"Vacca sua, eccellenza"—which are correctly quoted by Elze, should not have been altered into "vacca tua": this, if not a mere slip in printing, is an attempted correction which only betrays ignorance of Italian usage and idiom on the part of its concoctor.

Even less approvable than the omissions just mentioned is the detraction in which the translator, in his preface, indulges regarding the venerable and noble-natured Trellawny, found worthy to be loved by Shelley; and not only regarding him, but the various other writers of Byronic memoirs, with the one exception of Moore. Moore's *Life*, as I have already had occasion to observe, is as yet copyright, the property of Mr. Murray: the same publisher produces the translation of Elze's work: and the proverb, "Vous êtes orfèvre, Monsieur Josse," may recur to the memory of some readers.

We have, however, to thank the translator very heartily for a considerable body of apposite and interesting information which he has added in his appendix: as on the Byron lineage, and the taint of illegitimacy in it towards 1540; on the early poems of Lord Byron; and on his character as recorded in the personal narratives of the Rev. Mr. Harness, Lord Broughton, Mr. Finlay (who startled Byron in 1823 by his marked resemblance to Shelley), and Lord Harrington. A portrait of Byron at Cambridge, by Gilchrist (not particularly well engraved), and a facsimile of Byron's very first letter, dated November 8, 1798, when he was not much less than eleven years old, also enhance the interest of Mr. Murray's volume.

W. M. ROSETTI.

Sicilian Folk Songs. [Canti popolari siciliani, raccolti ed illustrati da Giuseppe Pitrè. Preceduti da uno studio critico dello stesso autore.] Vol. 2. Palermo, 1871. [Canti popolari delle Isole Eolie e di altri luoghi di Sicilia, messi in prosa italiana ed illustrati dal Prof. L. Lizio Bruno.] Messina, 1871.

I POINTED out the importance and interest of Pitrè's collection of popular songs in No. 15 of the *Academy*. The present continuation possesses the same qualities in the same or even a greater degree, as it contains not merely lyrical productions, but other materials as well, including those of a ballad character. The separate sections contain *Ninni* or *Canzuni di la naca*, lullabies or cradle-songs; *Jocura*, songs for children or nursery-rhymes; *Orazioni e Così di Diu*, invocations and prayers; *'Nnimini*, riddles; *Arii*, longer or shorter songs of seven or eight verses, subdivided into *Canzuni ad arii*, or simple lyrical airs, and *Storii ad arii*,

or songs with a narrative foundation; *Storii e Orazioni*, ballads and sacred legends; *Contrasti o Parti*, longer poetical encounters or duels (the shorter ones are called *sfeide* or *dubbii*, and consist of a single question with the answer); *Satiri*, or satires; *Canzuni murali*, moral or religious songs; and finally, *Muttetti di lu palio*, songs in praise of successful racehorses. I will proceed to give a few short samples of the various contents of the volume. A nursery-rhyme runs:—

"Varvarutteddu;
Ucca d'aneddru;
Nasu affilatu;
Occhi di stiddi;
Frunti quatrrata:
E te' cci 'na timpulata."

("Little chin, Mouth like a ring, Pointed nose, Eyes like stars, Square brows, And there's a pat on the cheek.") Like the Scotch: "Brow brow brenty, Ee ee winky, Nose nose nebbly, Mouth mouth merry, Chin chin chueky, Catch a flee, catch a flee." Every one knows too the English: "Eye winker, Tom tinker," &c. Another Sicilian child's song is:—

"Babbalucieddu, nesci li corna,
Nesci li corna ca veni tò nanna;
Veni tò nanna cu 'na menza canna,
E t' assicuta finu a la muntagna."

("Little snail, put out your horns, Put out your horns, for mother is coming, Mother is coming with half a stick, And will chase you as far as the hills.") So the Scotch: "Snail, snail, shoot out your horns, And tell us if it will be a bonnie day the morn;" and the English: "Snail, snail, come out of your hole," &c.

Amongst the *Orazioni*, we find prayers of a kind which are doubtless offered up in all parts of the world, and by a very interesting portion of the human race, namely, by maidens who wish for a husband. In Sicily, of course, the intercession of the saints is invoked, in the following terms:

"Sant' Antoninu,
Mittitilu 'n caminu;
San Pasquali,
Facitilu fari;
Santu 'Nofriu gluriusu,
Beddu, picciottu e graziusu."

("Saint Anthony, send us [a wedding], Saint Pascal, bring it to pass, Glorious Saint Onuphrius, let him be handsome, young, and agreeable.") These *Orazioni* or invocations are addressed to all kinds of supernatural beings, from God to the souls of departed criminals (see *Academy*, ii. p. 58), and they contain petitions for a bridegroom, for the punishment of a faithless lover, for an easy delivery as readily as for the return of an absent son, for a fortunate number in the lottery, for the death of the evil spirits in the body (!), for protection against lightning, &c. &c. They form a very remarkable class, distinguished by their superstitious foundation from the *Così di Diu*, or purely religious morning and evening prayers addressed to God, the Virgin Mary, and the guardian angel, and referring to the welfare of the soul. They are also distinct from the *Orazioni* or sacred legends which appear in a later section, to which I now turn. This is the most extensive of any (pp. 114-378), and contains nothing but narrative poems of a secular or religious nature, the latter being by far the most numerous and the longest, and generally relating to the Virgin Mary. Many of these are very interesting, and have received poetical treatment in other languages; amongst the others, I may mention those relating to famous robbers and their deeds, from which it appears that the sympathies of the people incline to the side of these heroes in a way not altogether suitable to moral principles. At the same time some allowance should be made for the oppression under which the lower classes were formerly

suffering in almost all countries, and from which they are not even yet completely relieved, so that it is scarcely surprising to find the robbers objects of envy for their free life in the woods and mountains, and of admiration as standing protests against all kinds of oppression. Robin Hood and the Klephets in the popular poetry of modern Greece are represented in exactly the same light. The officials and servants of the government on the other hand are the objects of the bitterest hatred to the Sicilian populace, so that in their songs even the inhabitants of Hell refuse to associate with *sbirri*, or to permit their entrance, in a way that reminds us of Dante's "Chè alcuna gloria i rei ayrebbher d'elli."

Of a very different nature is the poem *La Baronessa di Carini*, which tells how the Baron of Carini slew his daughter Catherine on account of a secret love affair with her cousin Vincenzo Vernagallo, in the year 1563. This is one of the best creations of Sicilian popular poetry, of almost unequalled beauty, and full of the most passionate tragedy strikingly set forth. There is a special edition of this poem, with an introduction and glossary by Salvatore Salomone-Marino (Palermo, 1870), which I have noticed in the *Götting. Gel. Anz.* for that year (No. 26). I pass over various other attractive poems in this and other sections of Pitrè's collection, and only pause for a moment at the *Muttetti di lu palio*, as in spite of their simplicity they must have some interest for friends of the turf. They belong, in respect of their metre, to the class of poems called *Ciuri* (*Academy*, ii. p. 59), and are sung by successful jockeys in honour of their horses as they pass through the crowd of spectators after the race. Some of them date from an early period, and are preserved in localities where no races are now held. Here is an example:—

"E vaja, via !
E la bedda mirrina
Pri pigghiaricci l'acula 8 patruni,
Vulau comu lu ventu e junciu prima !"

("Away, away, The gray mare, To win the prize for her master, Flew like the wind, and arrived the first !") The prize here mentioned consists of a gilt wooden eagle (acula), hung with large silver coins. Another is:—

"E loria loria !
Nta quantu cavaduzzi cc' è 'n Sicilia
Lu cavaduzzi mio porta vittoria."

("Hurrah, hurrah, Amongst all the horses that are in Sicily, My little horse wins the day !") This is the last in the collection, and is followed by charming melodies for thirty-one of the songs, and finally by a short glossary, containing those words which have not been explained in any of the numerous notes on the text. Pitrè has thus neglected nothing which could contribute to the intelligibility of his valuable collection, which offers a faithful mirror of the life, thought, and feeling of the Sicilian people. There remain, however, a good many difficulties in the language of the songs, which a reader who has not made himself at home in it will be glad of other help to overcome. This is offered, as regards the Sicilian dialect in general, and its variations from the forms of the *lingua illustre*, by Prof. Lizio Bruno's *Canti popolari delle Isole Eolie*, which contains a literal translation of all the songs into the literary language, and so makes it possible to obtain a tolerably complete mastery of those peculiarities. As to the special difficulties of vocabulary in the collections of Pitrè, Vigo, Salomone-Marino, &c., they will nearly all be met by the admirable *Nuovo Vocabolario Siciliano compilato da Antonio Traina*, which will soon be completed, and which I noticed at length in *Göt. Gel. Anz.* 1871, No. 26.

I must add a few words concerning Lizio Bruno's work. Besides the translation just referred to, he has also com-

pared in detail the style and matter of each of the hundred *Canzuni* in his collection with the popular songs of other Italian provinces; a comparison which, he observes, is of the greatest importance to our knowledge of the true character of popular poetry, and proves to demonstration that the songs of different places retain a closer relationship than is generally believed, in spite of all their migrations and meltings into each other which modify their external features. Bruno also brings forward instances of more artificial poetical compositions, to show that the chasm which separates them from those of the people is not so profound as it appears, since the source of true beauty does not lie in painful effort, but in the spontaneous inspirations of the heart. And certainly some of his remarks on this subject supply food for reflection, which must tend to diminish our faith in the fertility of the human mind and the apparent abundance of its ideas. Perhaps, however, Bruno has been tempted by his extensive reading to multiply illustrations beyond what is necessary to establish his point. His critical and exegetical explanations are valuable and instructive, but he would have done better to omit the etymological remarks, and especially all the Greek etymologies; Diez's *Etymologisches Wörterbuch* does not appear to be much studied in Sicily. As to the poems themselves, they are almost exclusively love-songs, and many of them excellent of their kind. I quote the forty-fourth and the forty-eighth, with Bruno's Italian translation, to serve as a key to the Sicilian:—

"Su' ricivutu 'nto 'n palazzu d'oru,
Posu li pedi e non passu cchiù ananti :
Li porte e li finestri sunnu d' oru,
Li ciamamiti di petri-domanti.
Ccà intra siti vu', caru tisoru,
È ccà lu Paradisu cu li Santi !
Cridu chi la rigina è vostra soru,
Lu figghiu di lu Re lu vostru amanti."

("Son ricevuto entro un palazzo d'oro. Poso i piedi (mi fermo) e più innanti non vò. D'oro sono le porte e le finestre; Di pietre-diamanti le tegole. Quà dentro ci siete voi, caro tesoro: È qui, coi santi, il Paradiso. Credo che la sorella vostra sia la regina, E il figlio del Rè l'amante vostro.")

"O frunti-spera, facci d' un giardinu,
Sciuri chi t' haju avutu 'ntra lu senu,
Ssu to' nasuzzu è un vero gersuminu,
Ssa to' buccuza lieva ogni vilenu.
Coddu di 'na carrabba cristalliu;
Curpuzzu d' ogni grazia ripenu;
Unni posa ssu pedi damascinu.
Fa sciäuru di ruosi lu tirrenu."

("O fronte-spera, o visu 'di un giardino, O fiore che ho tenuto nel mio seno. È un vero gesmino questo tuo nasetto. Questa tua bocca toglie ogni veleno. Collo di una guastada di cristallo; Corpicciuolo di ogni grazia ripieno, Ovunque posa questo tuo piede damaschino, Odora di rose il terreno.)

The beginning of No. 2. is noticeable, because it contains a mythologic allusion, a thing very rare in Italian popular poetry:—

"O bella siti 'n' acula suprana,
E siti un pocu graziusa e fina :
Nascisti 'nta li braccia di Diana," &c.

("O bella, voi siete un' aquila sovrana, E siete un po' graziosa e fina. Nasceste fra le braccia di Diana," &c.; but it would perhaps be better here to read "un pocu," i.e. "non poco," instead of "un pocu"); and likewise the end of No. 4, on account of its expressive thought:—

"Cu bascia sta tò bucca zuccherata,
No sputa, pi non perdiri a ducizza."

("Chi bacia questa tua bocca inzuccherata, Non sputa per non perdere la dolcezza.")

These specimens, as well as those taken from Pitre's first volume, illustrate sufficiently the character, or, in other words, the abundant flow and brilliant colouring of Sicilian love-songs. The length of the narrative poems in this second volume precludes citation, but what has already been said may suffice to draw attention to the popular poetry of Sicily in general, or to these collections of it in particular.

FELIX LIEBRECHT.

The Story of the Plébiscite. From the French of MM. Erckmann-Chatrian. Smith, Elder, and Co.

In the works of MM. Erckmann-Chatrian there are displayed many of those finer qualities of art which the few admire and the many disregard. Not, however, on account of these qualities, but on account of the quite negative merit of harmlessness joined with that faculty of style which in literary slang we term "readableness," did their works receive early notice and achieve early popularity in England. The public, which might well have fastened upon works with less claim to respect, happened to find pleasure in these; and to that fortunate accident we owe the possession, in comely English garb, of some half-dozen novels which sketch for us provincial France with the faithful minuteness of Jan Steen and the luminousness of Peter de Hooghe. Beyond provincial France—nay, beyond one country-side in all that field—MM. Erckmann-Chatrian rarely wander. The circle of their thought and work is almost as confined as is that of Jane Austen, though of course it is essentially different. It is at the same time more intensely localised, for while she knows few differences between Derbyshire and Hampshire, they mark the differences between villages almost adjacent, and one might profitably follow their stories with an ordnance map in one's hand and a *Guide-Joanne* at one's side to supplement the particulars they supply. If the thing they do were done less perfectly, one would tire of it—this ever renewed narrative of the peasant farmer, peasant soldier, peasant woman around Phalsbourg—just as, were they but less perfectly presented, one would tire of Miss Austen's squires' daughters, country gentlemen, and managing mammas. Like most true artists, MM. Erckmann-Chatrian recognise the limitations of their genius—whether consciously or instinctively, one does not greatly care—and if, in their case, the result on the one hand is an approach to monotony, such as is wholly avoided by the universal genius of Balzac, the result on the other hand is a fidelity quite incompatible with the universal audacity of About. About, brilliant always, is veracious chiefly when his story moves within the lighter circles of Imperial Paris. Wandering into the country, his pen remains amusing and caustic; but notwithstanding the accumulation of detail which his industry heaps up, he lacks the simple accuracy which MM. Erckmann-Chatrian appear to attain almost without an effort.

It is difficult to criticize *The Story of the Plébiscite* with any assurance of impartiality; for not only has it, in common with many another work of the same authors, a political mission, but it is political from end to end; and even if one can lay aside political prepossessions in discussing a work which deals with the Republicans of 'Eighty-nine and the Imperialists of the First Empire, it is hardly possible that they shall have no weight when one discusses a work which vehemently praises or vehemently blames the actors in the most exciting struggle of one's own time. It may be urged that praise and blame ate both dramatic, since they are expressed not by the authors in their own persons but by the characters of the story. But this plea, if ever made, will have to be disallowed when it is remembered that every wise and good man of the story is a French Republican,

while every scheming time-server is an Imperialist. Apart from this fact—which, if it be intentional, makes *The Story of the Plébiscite* a missionary labour, and, if it be unintentional, shows in this treatment of a contemporary theme all lack of that insight wide and profound which gave to *Hohenstiel-Schwangau* its immense and abiding value—apart, I say, from this fact, which mars the book, however it came there, *The Story of the Plébiscite* is a chronicle hardly less instructive than fascinating. The village life of Rothalp—treated in the earlier chapters—is painted in clear outline, with pure colour that will not fade. Its delightful freshness should be a relief to the novel reader. Soon, however, the village story merges into a chronicle of the war. The war, and not the village, is the main theme of the book. There is no elaborate analysis of character; yet the sketches of character are firm and true. Of these, the most important is that of the narrator—a dull, good miller, who voted "Yes," and saw the error of his ways when his wise cousin from Paris argued with him. This cousin, George, is in the present book the incarnation of good sense: he reminds one, therefore, of that other incarnation of good sense, Chauvel, the Protestant colporteur, in the *Histoire d'un Paysan*. The miller's wife and their son Jacob are slighter sketches. Grédel, the daughter, whom the narrating miller loves but little, but whom the reader will admire much, is a healthy, spirited, and unfamiliar figure; and there is real art in the way in which we are enabled to see her good qualities through a medium adverse to their display. There is wit as well as art in that sketch of the *sous-préfet* who enquires of the village mayor, "What is the spirit of your population?" and so interprets the answer that he may in his own turn report to the *préfet* the thing which is desired at head-quarters.

The Imperialists have M. Sardou, who writes *Rabagas*, that they may laugh and be re-assured: why should they not smile also when MM. Erckmann-Chatrian, from the other side, paint piquant portraits of the *sous-préfets* of the Empire? They may do this undoubtedly; and, notwithstanding differences, they may thank the authors of *Waterloo* and the *Conscrit* for having added by this *Story of the Plébiscite* to the long list of vivid, spirited, and simple narratives which on readers who seek mental refreshment rather than mental exercise confer a pleasure and a boon.

With here and there an exception, the translation, now reprinted from the *Cornhill Magazine*, is in good and facile English; and the pictures, by Du Maurier and Hubert Herkomer, are, in the true sense, illustrations.

FREDERICK WEDMORE.

The Bacchae of Euripides, translated into English Verse, with a Preface, by James E. Thorold Rogers. James Parker and Co.

THE *Bacchae* are one of the standing problems of literary history, and Mr. Rogers' contribution to its solution is the most characteristic part of his pleasant little volume. His attempt is too ingenious not to be interesting, though the interest is partly the interest of an anachronism. He refuses to believe that a man who has thought out life so clearly as he assumes that Euripides had done can radically change his convictions at the age of seventy-five unless his faculties have been impaired: consequently he is induced to conceive the play as an insincere but splendid parable whose moral is that superstition is the only and the precious check on despotism. Such a parable would have been quite in place at the court of Archelaus; but, after all, the suggestion reminds us of Warburton, who found the Eleusinian mysteries in the Sixth Book of Virgil. The writer has been led to an extreme solution by disregarding the circumstances which attenuate the problem. If Euripides had been a thorough-

going rationalist, he would have come into collision with the homely mysticism of Socrates. In fact Greek paganism scarcely presented sufficient resistance to rationalism to consolidate it. No doubt Euripides' opinion of the received mythology was lowered by his fondness for dwelling on the obvious fact that it was used as a political machine of no creditable kind. But he probably remained a sincere polytheist just as Voltaire remained a sincere theist, though both rather preferred to keep at a distance from the objects of their belief, whose names were so often taken in vain in the society in which they lived. And of course Euripides gained more by transcendentalising anthropomorphism into nature-worship than Voltaire by substituting an abstract First Cause for the personal God of Christianity. Then we have to remember that the character and position of women was a subject which always had a strong though painful fascination for the woman-hating Euripides: in the Bacchic ecstacy (which, as Mr. Rogers points out, he probably witnessed for the first time in Macedonia), he found their consolation and emancipation. Nor would it be surprising if Euripides under new and stimulating conditions experienced, like Gentz, in his passion for Fanny Elsler, the strange phenomenon of a second youth: and it would be more satisfactory to find the explanation of the character of Cadmus here than in the cheap hypothesis of dotage. But whatever the true theory of Euripides' conversion, it did not involve such a break with his past as to warrant us in throwing doubt on his sincerity. Its modern analogue would be not a veteran socialist giving in his cohesion to ultramontanism, but a veteran man of letters admitting the pretensions of spiritualism. This reminds us of another mistake which runs through all the contrast between Euripides and Aristophanes; Mr. Rogers seems to assume that the division between the old and new school at Athens was mainly horizontal, whereas it was mainly vertical; all the questions of the day did not resolve themselves into questions of class politics. But the preface contains much instructive matter, though the main positions are questionable. The translation maintains an uniform level of manly elegance and vigorous fidelity. It may be read with pleasure, at least without effort, by itself, and with respect in the presence of the original. It is less rich and musical in language and metre than Dean Milman's, but it is free from the appearance of occasional feebleness; it looks decidedly more accurate, and upon the whole it is more accurate. The grim humour of the two last scenes between Bacchus and Pentheus is better brought out. The attempt to naturalise Greek choral metres in English is made with creditable taste and judgment; but the result is tame.

G. A. SIMCOX.

PROFESSOR MAURICE.

PROFESSOR MAURICE, who died on Easter-day, had perhaps a more important part than any of his contemporaries, except Dr. Newman, in accomplishing the transformation of religious thought in England, which had been prepared by Coleridge, and foretold in language too pregnant to remain unfulfilled. Looking back on his influence on speculation (which practically came to an end when that of *Essays and Reviews* began), we see that what he really effected was to deprive the traditional orthodoxy of the *prestige* of superior reverence and sanctity, to prepare a piety, what some might call, in his disciples at any rate, a pietism, which would continue to exist fearlessly and helplessly in the presence of criticism until criticism was ready to absorb it in the shape of moral earnestness, and perhaps to retain it in the shape of simple energy. Coming as he did to Anglicanism with the desire to complete what was positive in Unitarianism, he was led to deprive the popular theology of all its elements of resistance, while he retained for himself and his disciples all that conduced to fervour or repose. In many

respects the completest of his works is the *Kingdom of Christ*, which has long been out of print. Here he applied to all the competing systems of the day a single criticism—each rested on a true idea which it destroyed in attempting to express it, while the Church of England, which expressed nothing, embraced them all. There is no real inconsistency between this point of view and his eager championship of the Athanasian symbol; creeds are at once the best foundation and the best substitute for theological science. The antithesis between faith *in* persons and in propositions *about* them is in itself important, but it has little value for dogmatic theology; if propositions *about* the object of faith are impossible *a fortiori* a conscious relation with that object must be impossible, any truth to be communicable must pass through the sphere of consciousness before it transcends it. In his *Theological Essays*, Mr. Maurice dealt with the Incarnation, the Atonement, and the doctrine of Future Punishment, and it is by his treatment of these that he exercised most influence and is still best known. His principal addition to the early Alexandrian doctrine of the Incarnation was suggested by his Unitarian antecedents; he pointed out that the benevolent deity of Socinus was rather too like a god of Epicurus. It would be useless to attempt to state his doctrine of the Atonement; so far as it could be stated, it was a repetition of obvious and inadequate solutions; he attempted to escape from their inadequacy by transcendentalising the abstract idea of sacrifice till it became unmeaning. He was more fortunate in pointing out that the idea of eternity transcended mere temporal everlastingness more certainly than it included it; in this way he gained some relief for the sympathies of mankind, though at the expense of the grand conception of a really final consummation of all things, and, while he escaped the deadening comfort of mere universalism, he forfeited the advantage of its immense logical plausibility. His controversy with the late Dean Mansel was a long *ignoratio elenchi*, the more regrettable because the *docta ignorantia* of the *Bampton Lectures* was really the substratum of a homely mysticism which rested Christianity on historical facts corresponding to the permanent needs of man, and had no temptation to buy a respite from historical criticism by translating individual desires into the supposititious intuitions of the human race. This tendency pervades and disfigures Mr. Maurice's numerous Biblical works, for though he was sufficiently influenced by Coleridge to attach himself to the contents of the Bible rather than to the authority of the writers, he carried the impulse no further. This was natural, as in Coleridge himself historical criticism had been secondary to doctrinal mysticism, and so it may be said that Mr. Maurice has completed the work of Coleridge by carrying all his principal suggestions into the sphere of practical edification in which they have borne and are bearing their full fruit.

G. A. SIMCOX.

LITERARY NOTES.

The current number of the *British Quarterly Review* contains a very intelligent appreciation of Matthew Arnold's poetry. His relations to Goethe and Wordsworth are well marked. Though he imputes his own method to Wordsworth, it is true that the master took up nature into his own mind, while the disciple escapes from his own mind into nature. It was also worth while to point out that the keynote of his poetry is resistance to the despondency which springs from intemperance and perplexity; and that, except in the *Sick King of Bokhara*, he has seldom, if ever, found a definite positive subject adequate to the mood he wished to express, so that the completeness of his elaborate poetry is purely internal, and cannot be measured by any objective standard. The reviewer commits himself to the opinion that the value of the unrhymed poems is purely rhetorical; as rhetoric he sets them very high.

In Westermann's *Monatshefte*, for February, there are two or three unpublished letters of Schiller's; the first (July 1788), written in a horrible mixture of Italian and German characters, relates to the first representation of *Don Carlos*. Schiller agrees with an anonymous critic that the play is too long for acting, but rather than leave out parts for the stage, he would take it from the stage altogether. The last, undated, is to

Nicolai, who has admired *Tell*, to its author's surprise, as he was formerly a foe to what was called "Kraft- und Original-Genies"; Schiller is grateful for his reviewer's compliments, but begs that another time his title of "Hofrath" may not reappear quite so often.—The same journal contains a series of papers by J. Berger, on Snow Crystals, and the illustrations (in March) of the frost "window-flowers" are very carefully executed.—Freiherr von Maltzan sends the legend of a miraculous spring in Arabia (about 15° N. and 46° E., but no European has visited the spot), in which the natives bathe, and he who wishes for hot water exclaims, "Oh, Mesaud (the name of the presiding Djinn), hot!" and he who wishes for cold says, "Oh, Mesaud, cold!" and to each the water flows as he desires. On enquiry it appeared that the different requests had to be preferred on different sides of the stream, but it was heresy to suppose this condition had anything to do with the marvel. The spring flows from the spot where a serpent disappeared, which had been hatched in the bosom of a poor man (he could not even borrow a hen), from a stone egg which had been sent by some saint in answer to his prayers for help.

In the *Revue des deux Mondes* (April 1) M. Amédée Thierry continues his interesting series of *Récits*, of which the present number is devoted to the Council of Chalcedon.—M. Renan follows his hero de Nogaret down to the destruction of the Templars.

The proprietors of the *Revue des deux Mondes* are going to publish a history of the Review, with notices of its chief contributors, and of their papers, from the correspondence in the editor's office. It would be well if the proprietors of the *Edinburgh* and *Quarterly* would follow the example. It is very useful to know what articles are by Southey, Sir F. Palgrave, &c.

Art and Archaeology.

The *Marlborough Gems* catalogued, with Descriptions and an Introduction by M. H. Nevil Story-Maskelyne, M.A., F.R.S. London, 1870.

As a careful catalogue compiled with knowledge abreast of the time, Professor Maskelyne's work is a contribution to archaeology which will be valued all the more that ancient engraved gems have been too rarely subjected to serious treatment. Its value in this respect is enhanced by an introduction in which two questions of unusual interest are dealt with, the nature of the stones employed by the Greek and Graeco-Roman engravers, and the growth of the art of gem-engraving in ancient times. Speaking with the authority of a mineralogist by profession, his statements on the former question will be received with just the assurance which was wanting in most previous writers. With regard to his sketch of the features by which successive periods of the art are distinguished, we have found it, short of the complete demonstration which could only be given in a work of large compass, all that could be desired. He ought, perhaps, to have made more of what appears to be both a new and very convenient way of accounting for the almost total absence of gems bearing the stamp of the age of Pheidias, by assuming that the impulse given to the pursuit of ideal beauty by the example of Pheidias was felt only by the great artists of the day, those of weaker calibre, such as gem-engravers, continuing in the meantime the severe careful style in which they had been trained, until a new school arose, with obvious peculiarities and exaggerations easily imitated. In the history of vase-painting we have the same phenomenon, a rigid, minute, elaborate style, uniformly attributed to the age immediately before Pheidias, or more correctly Polygnotos, the great painter, his contemporary, then an apparent blank followed by a style at first severe, but quickly becoming bold and free. Gem-engravers, being,

it is probable, men of higher artistic attainments than vase-painters, were presumably more under the influence of the guiding spirit of their time, and it may have occurred more frequently than we suppose that one or other of them approached the ideal of Pheidias, as in the figure of Sappho on a burnt cornelian, in the British Museum, which for purity of feeling and exquisite workmanship has perhaps no rival among existing gems. There are also a few pastes which suggest, as Prof. Maskelyne observes, the sentiment of the age of Pericles. But straining our limits of the Pheidias style so as to admit the greatest possible number of gems, we have still only a few to set between the hundreds of scarabaei apparently possessing all the characteristics of the previous age and an equal number of splendid gems of the later style. It may certainly be that the immense sacrifices made then by private individuals for the common good and the intense interest of all classes in public affairs withdrew to some extent the patronage of the wealthy from work of this kind. On the other hand, if it can be shown—and it is a notorious fact—that even the metopes of the Parthenon executed under the eyes and direction of Pheidias betray strong marks of the former age, it will be better to assume that, as we descend in the grade of artists, the power was proportionately less of rising to the occasion presented by him. In this case, we must imagine the gem-engravers retaining and working out further the style in which they had been trained. It should also be observed that a taste for elaborate rigid archaic work endured in basrelief as well as in vase-painting till long after it had passed away as a living style, was revived, if it did not in some measure continue uninterruptedly, in the time of Augustus, and retained favour with successive emperors and private patrons. The question, however, does not so much concern the attractiveness of archaic work as the extreme difficulty which ordinary artists must have experienced in seizing the spirit of Pheidias, and of this perhaps no better proof could be advanced than the frieze from the temple of Apollo at Phigaleia, now in the British Museum, the work, it is believed, of Iktinos, the architect of the Parthenon. The perfect freedom in the treatment of the figure and of the drapery which Pheidias introduced is taken full advantage of, but the calm ideal beauty which was his great charm is exchanged for wild movement. And again in the sculptures from the temple of Victory at Athens, executed perhaps in his lifetime and certainly in the presence of his work, it is barely possible to trace his influence. Treasures of gems may yet be found in Greece which will revolutionise our ideas, but in the meantime the facts seem to bear out Prof. Maskelyne's theory.

The Marlborough gems were collected in the course of the seventeenth and eighteenth centuries, before Etruscan tombs had yielded their treasures, and before excavations in Greece had brought to light any important example of the early style of art. They were collected at a time when nothing higher in sculpture was known than the Apollo Belvedere or the Laocoön group, and so it happens that a collection still priceless in the eyes of many is of little consequence in the history of ancient art.

In the otherwise accurate descriptions of the gems we notice a mistake (No. 168) arising from a misunderstanding of the word *Kriophoros*, which was applied to Hermes as a guardian against pestilence, not as a "god of herds." The title appears to have originated in a tradition of his having driven away a pestilence from the town of Tanagra, by carrying a ram on his shoulders round the walls, an event commemorated by a statue of him in the act. As god of herds, he was called *Nomios* or *Epimelios*. It is also a mistake, we think, in the arrangement of mythological sub-

jects, to separate Demeter from Persephone. To the Greek mind they were the inseparable τὸ θεῶν or αἱ δύουραι θεαί.

ALEXANDER S. MURRAY.

ART NOTES.

The sale of the Persigny collection on April 4 excited great expectations, which resulted in disappointment. The sale took place at the Hôtel Drouot, the two great rival auctioneers M. Escribe and M. Pillet co-operating on the occasion; but the prices obtained were less than moderate. "Departure for the Army," by Terburg, put up at 60,000 francs, was knocked down for 5000 francs; and this appears to have been the highest sum reached for a single picture. The pseudo Raphael went for 2000 francs, and Vanloo's "Portrait of Maria Leckzinska" for 3600 francs; but the English pictures fared even worse. Sir Joshua Reynolds' "Portrait of the Prince of Wales" was knocked down at 3200 francs; his "Portrait of a French Lady," 460 francs, and "Portrait of an English Lady," 500 francs. Gainsborough's "Portrait of a Boy" went for 210 francs. The sum total realised by the sale of sixty-eight pictures was under 53,000 francs.

The unrivalled exhibition of a special class of Turners, in the gallery of the Burlington Fine Arts Club in Savile Row, is prolonged pending the completion of arrangements for a prospective Holbein exhibition by the same society. No pains have been spared, by the amateurs to whose zeal this collection is due, in the effort to make it as complete as possible, and to arrange and catalogue it in the way most serviceable for reference and instruction. Its staple feature consists in a complete series of the *Liber Studiorum*, with each plate exemplified in two or more (and sometimes as many as eight or nine) stages, from the first strongly bitten etching of outlines to the final expression of the mezzotint as dictated by the science or caprice of the master, in toning, filling-in, touching, and retouching. But still more interesting than this central series are the adjuncts which are appended to it, in the shape of some beautiful examples of the unpublished plates designed but not included in the *Liber*; nine original drawings for plates both published and unpublished of the *Liber* class; and two screens full of specimens of a rare and almost priceless order of mezzotints, of which the destination is unknown (as was the existence until after Turner's death), and which bear some resemblance to the *Liber* by their scale and subject, but are printed in black colour instead of brown. Altogether, we have here a unique and inexhaustible field of study, for which the best thanks of all who care for such things are due to the gentlemen by whom it has been contributed and organized.

The direction of the Louvre is about to repossess itself of the gallery on the river side which during the Empire was diverted from the purposes of the museum to those of the Tuilleries. The necessary works will be rather costly, so meanwhile the new gallery intended to receive the Byzantine pictures of the Campana collection is being finished. It is situated on the second floor of the wing of the Colonnade. Two new pictures have been hung in the course of the present month. One is said to be a superb Roger van der Weyden, representing the descent from the cross. This fine work was bequeathed to the Louvre last year by M. Mongé Misbach. The other picture, left by M. Jules Vallé in 1870, is "The Denial of Peter," by Lenain.

The museum at Lille is becoming more and more important. Almost every month we have to chronicle fresh acquisitions. Poussin's sketch (oils) for "Le Temps enlevant la Vérité," two fine portraits by van der Helst, and a magnificent portrait of a woman by Franz Hals, have quite recently been acquired for the collection.

An active movement is going on at Bruges in favour of uniting all the scattered art-treasures of the town in one great central collection. If this project takes effect, it will at last become possible to study the works of Lancelot Blondeel, of Pourbus, of the two van Oost, and the numerous unknown treasures which are at present buried in the different municipal establishments, such as the Béguinage, the Pottery, the Bogaerde School, and the Damme Hospital.

M. Léon Cogniet is about to sell all his studies and pictures.

The cases containing the fragments brought from the Temple of Diana at Ephesus have now been deposited in the British Museum, and are in course of unpacking. Amongst the recent acquisitions of the Museum is a head of Alexander the Great (*ronde bosse*), which was unearthed some time since in Sicily. It is a very distinguished piece of work, and appears to be a late (Alexandrian?) reproduction of a contemporary bust.

Mr. Watt's diploma picture of "The Murder of Abel" is unfortunately in too unfinished a state to admit of its appearing on the walls of the Royal Academy exhibition. He will, however, be well represented by several portraits, all good examples of his hand, and by "Daphne" a very refined and finished rendering of a poetical conception. Mr. Leighton contributes a thoroughly successful portrait of the Rt. Hon. Sir Edward Ryan, secretary of the Dilettante Society, in which he has vigorously attacked the difficulties of artificial light, but in which chief attention will be concentrated on the admirably solid and expressive painting of the head. There are yet three pictures by this painter—"A Leader of Condottieri"; "After Vespers," essentially a very pretty picture of a lovely girl with eyes full of dreamy exaltation; and "Summer Moon." The last is truly a pictorial poem: two young women have fallen asleep curled against each other; through the circular opening above their heads we see the blue of a southern night. Every sweeping line of drapery, every shade of colour, combine in one lovely harmony. Mr. Millais, besides the pictures by him already mentioned (see *Academy*, vol. iii. p. 107), sends two Scotch landscapes, very brilliant work, but hardly so interesting in subject as the "Chill October" of last year, "A Portrait of the Marchioness of Westminster," and "Portraits of Three Young Ladies playing Whist with Dummy." Some portraits which have been sent in by M. Laugée deserve attention, not only on account of their workmanlike execution, but because his sitters look like ladies, not like women perplexed "by the burden of an honour unto which they were not born." It is pleasant to see among the younger painters evidence of growing interest in the poetical side of their art. Mr. Frank Dicey has taken a motive from the Song of Solomon, "Come, my beloved, and let us go and dwell in the villages." His picture is very carefully worked and thought out, and has much distinction of style. The girl leans back as she stands against her companion, who lifts his hand to gather fruit from the overhanging vine. The sentiment of languorous enjoyment characterizing southern life pervades both figures.

The city of Nottingham has just been selected by the Lords of the Committee of Council on Education as a fitting centre for the establishment of a Permanent Exhibition of Fine and Industrial Art for the Midland Counties, this being the first permanent provincial exhibition in connection with the South Kensington. It will be held provisionally in a suite of rooms in the Exchange Hall, and is to be opened at Whitsuntide, Mr. Cole having been to Nottingham to give the committee his advice as to the arrangement and management. South Kensington will send paintings and other objects of art on loan, and collectors generally are invited to contribute, a call which will doubtless readily be responded to, as the display at the Derby Exhibition in 1870 showed the richness in art-treasures of the Midland Counties.

Dr. Charles Maclean has accepted the appointment of music director and organist at Eton College.

Contents of the Journals.

Gazette des Beaux-Arts.—The present number contains—"Journal de mes Fouilles" (first article), by M. Beulé. The scientific results of these investigations, which date from twenty years back, were made public by M. Beulé, in his work on the Acropolis of Athens. What he now prints are the lively notes in which he chronicled day by day his glimpses of hope and moments of discouragement whilst the excavations were in progress. The first article leaves us in July 1852, at the time when works begun by him at his own private cost had become a matter of public interest, and were taken up by the French

government.—“Curiosités du Musée d’Amsterdam.” This article is a notice, by M. F. de Tal, of Kaiser’s valuable reproductions in facsimile of engravings by unknown masters of the fifteenth century.—“Encore un mot à propos du Cenacolo de San Onofrio,” by Émile Maruéjouls. M. Maruéjouls adduces proofs and arguments in favour of the attribution of this work to Raphael. Passavant peremptorily rejected it, but Passavant was often exceedingly hasty and rash in passing judgment, and the evidence on the other side of the question merits attention.—“Les Palais brûlés” (fourth article), by M. Ed. Fournier.—“La Caricature et l’Imagerie en Europe pendant la Guerre de 1870-1871” (second article), by M. Durany.—“Les Dessins de Parmesan,” by M. Émile Galichon. This notice is accompanied by various illustrations, one of which, “Femme tenant une victoire à la main,” after a drawing in the collection of M. Galichon, is a very fine example of Parmesan at his best.—The number closes with an article on the destruction of art monuments at Strasburg, by M. E. Muntz.

Bullettino dell’ Instituto (February) describes the excavations going on at Capua along the old road that led to Mount Tifata. The tombs were rifled of their bronze urns in Roman times (*Sueton. Jul. 81*), but the pottery (mostly of Greek workmanship) remains.—Henzel gives at length a military diploma, the second part of which has been just discovered, and which slightly rectifies Mommsen’s view as to the time of Trajan’s holding the Tribunician power—a well-known difficulty in chronology.

Im Neuen Reich (No. 11, 1872) contains an account of the mosaic found at Pesaro, probably of mediaeval date, but with the remains of an ancient one below it. An attempt is made to restore the inscriptions on it, and what seem to be a hexameter and pentameter in leonine verse—perhaps of the twelfth century.—A discussion follows as to the position of Germany relatively to the Church question.

New Publications.

- C. S. C. Flight Leaves. Cambridge : Deighton, Bell, and Co.
 COBBE, F. P. Darwinism in Morals, and other Essays. Williams and Norgate.
 FERRUCCI, Aloisii Chrysostomi, Civis Romani Electa Carmina. Leipzig : Brockhaus.
 FÉTIS, F. J. Histoire générale de la Musique : depuis les temps les plus anciens jusqu’à nos jours. Tom. 3^{ème}. La Musique chez les peuples de l’Asie mineure et de la Grèce. Paris : Didot.
 MITFORD, Mary Russell, Letters of. Ed. by H. Chorley. 2 vols. Bentley.
 VAUGHAN, R. B. The Life and Labours of St. Thomas of Aquin. Longmans.

Physical Science.

Contributions to the Parthenogenesis of the Arthropoda. [Beiträge zur Parthenogenese der Arthropoden. Von C. Th. E. von Siebold. Mit zwei lithographirten Tafeln.] Leipzig : Engelmann, 1871.

In the year 1856, it will be remembered, Professor von Siebold published his first memoir* on this phase of animal physiology, when it was shown that for certain butterflies as well as the bees the apparently well-established law of bisexual generation was not true, and that these insects produced a progeny without intercourse. Although this memoir was not the first to treat this important question at great length—a discussion of the question of this mode of generation in Aphides having arisen in the middle of the last century—it caused a great stir among naturalists, and gave rise to a general controversy on the question. Little, however, need be said respecting the history of this question, as there appeared at the time in England an excellent essay by that marvellously fertile author, Mr. G. H. Lewes, in his *Seaside Studies* (second edition, 1860, pp. 296-340), wherein the history of parthenogenesis was written and criticized with great ability and judgment.

In his first work the Munich professor already enumerated some cases of parthenogenesis which he had set aside for further investigation. He now illustrates the method in

which one of the commonest wasps of Southern Europe is propagated, and fully disproves the views of all those who, like the members of the French Academy or the late Professor Schaum, of Berlin, M. Plateau in Belgium, and many others, doubted the correctness of former investigations, more especially of those made on bees.

The wasp which served as an object for the professor’s investigation was *Polistes gallica*, an insect of rather common occurrence in South Germany, thereby providing him an excellent example by which to test the accuracy of his views. This, however, was not to be accomplished without great exertion and long sustained observation. Whoever reads the chapter of his book which treats of *Polistes gallica* will be struck with the amount of time, exertion, perseverance, and devotion, which must have been expended in working out the question. We read of extended experiments made and immense numbers of cases most accurately examined, so that the generalisations rest upon the broadest possible bases. In like manner another hymenopterous insect, *Nematus ventricosus*, was studied, and yielded equally important and confirmatory results. Other insects, like *Vespa solsatice*, *Psyche helix*, and *Solenobia triquetella* and *lichenella*, are more briefly, though not less accurately, considered, and very great care has been bestowed on the following Crustaceans : *Apus cancriformis* and *productus*, *Artemia salina*, *Limnadia Hermanni*, and some *Daphniidae*.

To give a striking instance of the extent of Professor v. Siebold’s labours, it may suffice to direct attention to the statistical notes on *Apus*, found on pages 174 and 175. Professor v. Siebold wished to determine the exact number of males among the far more abundant females. He collected *Apus* from twenty-one different localities, the whole number amounting to 13,000 specimens. Among these were found only 319 males! In their selection every specimen had to be examined separately, as the general aspect of male and female is similar, and only a slight difference to be observed at one of the extremities. Professor v. Siebold, moreover, measured each individual of this community in order to test the statement of Professor Kogubowski, who contends that the males are invariably smaller than the females.

To those who have not studied zoology, that branch of science may appear rather dry and uninteresting where to attain scientific results we have merely to count, to measure, and to classify. Though such prejudice is even widely spread, it should not be forgotten that each science and art, to yield results of importance and of wider bearing, has to be pursued laboriously along such dry and uninteresting tracks. The critic, on the other hand, gathers from Professor v. Siebold’s labours material whereon to base conclusions of a broader bearing, and finds in the methods in which he conducted his experiments a model for all those who shall be disposed to follow the same lines of biological research.

This element in Professor v. Siebold’s book must be especially commended, since it cannot be doubted that the investigation of the habits and life of animals is now cultivated less than it was some fifty and more years ago, and much less than the present state of biological science requires. Mr. Darwin has revived it to a great extent, but through Mr. Darwin also has arisen the necessity for his followers to deal with these studies. It is very gratifying, therefore, to meet with another zoologist, especially a man of Professor v. Siebold’s reputation, who continues to cultivate with such special care the investigation of physiological nature, and to blend therewith comparative anatomy, the counterpart of biological research.

* *Wahr Parthenogenese bei Schmetterlingen und Bienen. Ein Beitrag zur Fortpflanzungsgeschichte der Thiere.* Von C. Th. E. v. Siebold. Leipzig : Engelmann, 1856.

We find then in this work not only the proofs that parthenogenesis is an established fact amongst many animals, but meet with excellent and highly important anatomical descriptions of the structure of the sexual organs and the formation of the egg in Insects and Crustaceans. As the title of the book does not indicate that it considers these subjects, it may be well to direct attention to these points.

According to Professor v. Siebold's observations there are in the ovary of *Polistes* vitelligenous cells and true ova, and the latter received from the first a considerable amount of vitellus. Each ovary consists of several tubes, each tube of a changing number of egg-compartments. The egg-compartment is composed of several vitelligenous cells and one egg-cell. There is around these an epithelium and a tunica propria, and this tunica propria is in its turn surrounded by peritoneal tissue, muscular fibres, and tracheae, which connect the different portions of the organ to each other and to the peritoneal tissue of the heart. At the other end *the ovary is free, though not in continuation of the oviduct*, their union being only produced by peritoneal tissue.

As regards the formation of the ovum, v. Siebold comes to the following important conclusions : 1. The place where the germ-cells are first developed is the upper part of the ovary-tubes. 2. These germ-cells, differentiated somewhat later into vitelligenous cells and egg-cells, do not move further down in the tunica propria of the ovary, but the tunica propria, together with its epithelium, moves by a remarkable process of growth downwards in the peritoneal tissue, enveloping the ovary-tubes, and thus carries its contents with it. The egg-cell and vitelligenous cells, increasing in size, form single egg-compartments, which by and by become surrounded completely by the tunica propria with its epithelium. The latter at last separates the egg, when ripe, completely from the upper part of the ovary-tubes, and becomes changed into the chorion—the vitelline membrane being a product of the egg already in the ovary ; the tunica propria surrounding the compartment also separates from the remaining part of the ovary, and eventually detaches the egg also from the vitelligenous cells of the same compartment, their last union being made by a channel which, after separation, is transformed to the micropyle. 3. When the lowest compartment has attained a ripe condition, the egg passes from the peritoneal envelope to the oviduct, freeing itself at the same moment from its connection with the mass of vitelligenous cells hitherto attached to it. 4. The external surface of the egg, which has passed into the oviduct, changes very quickly, in so far as the tunica propria, which still surrounds it, is concerned ; it becomes gelatinous, is broken up, and envelops the chorion as a sort of sticky matter. 5. The vitelligenous cells belonging to this egg generally remain at the lower end of the ovary, and undergo a process of degeneration. The tunica propria enclosing them undergoes the same disintegration as that of the egg, whilst the vitelligenous mass, which greatly resembles the corpus luteum of Vertebrates, passes between the peritoneal envelope and the tunica propria of the next egg-compartment, and finally reaches the very top of the ovarian tubes.

We cannot discuss here in any detail the specialities of these processes as described by v. Siebold ; we would merely remark that, if v. Siebold's statements be proved by further investigations to be correct—and they are still at variance with the observations of other eminent zoologists—their bearing on general morphological questions will be of very great importance.

Another point of a very striking nature is the way in which the egg in *Apus* is formed. Siebold gives an account of it on pp. 187–193. The ovaries are composed of a great

mass of follicles, each of which opens through a short conduct into a general and broader one, the orifice of which lies close to the eleventh pair of feet. Each follicle is composed of four cells, one egg-cell and three vitelligenous cells. The former thrives, the latter waste away ; but, strange to say, the egg is not developed from the elements of one follicle, but by the union of the contents of two or three of them ! This union takes place in the general oviduct, and it is here also that a chorion is formed round this yolk-mass, for thus it must be called. The eggs are then extruded and fall to the bottom of the little pond the animal lives in. This example of the formation of an egg from the elements of a great number of cells—not from those representing a single cell, as is usually the case—is most striking. It would be of the highest interest to endeavour to trace similar characteristics among allied forms of Crustaceans.

On pp. 223–238, Professor v. Siebold makes some concluding remarks on the questions treated in his book. He does not discuss the entire relation of parthenogenesis to other modes of propagation, but encourages the hope that light may be thrown on another problem, that of sexual differentiation in the egg—some of the parthenogenetic insects producing males only, others only females. This is undoubtedly one of the most interesting questions in the whole range of biology, and its solution would be of the highest importance in its bearing on many of the ideas and superstitions of common life.

It is, moreover, very desirable that we should be enabled to form a correct idea of advantages or disadvantages attending parthenogenesis as a mode of propagation. Teleology in its old sense having been abandoned by exact science, there are nevertheless abundant reasons for revising teleological investigations in their applications to the Darwinian theory. Each fact in physiology and morphology is capable of an explanation consistent with the theory of natural selection, and this is demanded by modern science. And parthenogenesis, alternate generation, paedogenesis—yea, more than all, the common process of bisexual generation—are as yet vast problems considered from the point of view of the theory of natural selection. It is even highly probable that those who see in parthenogenesis a phenomenon irreconcilable with the views of rational physiology, may yet find that, from the Darwinian point of view, ordinary propagation offers a problem beset with still greater difficulties, and demanding still more profound thought for its complete elucidation. This difficulty presented itself already in his time to a man who was by no means easily puzzled with anything that came within the grasp of his genius—Kant, who, in writing from Königsberg on March 30, 1795, to Schiller, says :—

" So ist mir nämlich die Natureinrichtung : dass alle Besamung in beiden organischen Reichen zwei Geschlechter bedarf, um ihre Art fortzupflanzen, jederzeit als erstaunlich und wie ein Abgrund des Denkens für die menschliche Vernunft aufgesessen, weil man doch die Vorsehung hierbei nicht, als ob sie diese Ordnung gleichsam spielend, der Abwechslung halber, beliebt habe, annehmen wird, sondern Ursache had, zu glauben, dass sie nicht anders möglich sei,—was eine Aussicht in's Unabsehbliche eröffnet, woraus man schlechterdings nichts machen kann, so wenig wie aus dem, was Milton's Engel dem Adam von der Schöpfung erzählt : ' Männliches Licht entfernter Sonnen vermischt sich mit weiblichem zu unbekannten Endzwecken.' "

ANTON DOHRN.

Scientific Notes.

Geography.

Arctic Exploration.—Great things are in preparation for the attack of the unknown region surrounding the North Pole during the coming summer and autumn. From Dr. Petermann we learn that eight continental expeditions are being fitted out, by Austria, Sweden, Norway,

and France. Foremost among these is the Austrian, under the leadership of Lieutenants Weyprecht and Payer. The remarkable results of the trial voyage made by these explorers last season have excited such an interest in the Polar question in Austria, that from the Emperor, the government, and societies downwards, all classes have eagerly contributed towards the fitting out of a more complete expedition. A sum of about 17,500*l.* has already been raised; a screw steam-vessel has been purposely built at Bremen; and everything is in readiness for the start at the end of June. The plan of the voyage is that projected by Lieut. Weyprecht (see *Academy*, vol. iii. p. 71); and the ship is provisioned for three years' absence. It is proposed to spend the first winter off the northmost cape of Asia; to employ the second summer in the exploration of the Central Polar region; and in the third season to penetrate to Behring Strait, and thence to an American or Asiatic harbour. The vessel is of 220 tons burden, with the rig of a three-masted schooner, and has engines of 95 horse-power. Besides the leaders, the expedition will be accompanied by two officers of the marine, named Brosch and Orel, a surgeon, machinist, two chamois-hunters and glaciermen from the Alps, and sixteen picked seamen. Graf Wiltschek, a warm supporter of the cause, will operate with the expedition for the first season in a vessel provided at his own cost, and will also be accompanied by scientific men. He will also establish a provision depot for the use of the chief expedition on the farthest land of Novaia Zemlia.—Again, an expedition led by Nordenskiöld, under the direction of the Royal Swedish Academy, contemplated since 1861, is to be undertaken this year. Its plan is unfortunately almost identical with that conceived by Parry, and which he proved to be impracticable. It is that of wintering on the northmost islets of Spitzbergen (the Seven Isles), whence by the aid of fifty reindeer an over-ice journey northward will be attempted.—Two Norwegian steamers, navigated by Captains Jensen and Svend Foyn, enterprising whale fishers, will follow the course of the Austrian vessels towards the Siberian seas. Numbers of specially built steam-vessels have this year been added to the Norwegian fishing fleet; and, instructed by Professor Mohn, of Christiania, the masters of these vessels may be expected to add greatly to their meteorological observations of past years.—The latest news of Captain Hall's American expedition is of date September 5, on which day Upernivik, the highest station on the West Greenland coast, was left for the higher north.—Nothing has been heard of the French expedition under Octave Pavé since its departure from San Francisco for Eastern Siberia; but a second French voyage, instigated by M. Ambert, to whom the inheritance of M. Lambert has descended, is about to begin in a vessel from Havre. The objects of this voyage are not only to be geographical and scientific, but "practical results will also be aimed at, such as the taking possession of new lands, whale fishery, and fishery of other sorts."—Rumours are afloat of an English expedition, with which Captain Sherard Osborn's name is connected. Parry's "farthest" is still the most northerly point yet reached on our globe. Let us hope that the honour of surpassing his achievement will belong to one of his countrymen, not to a foreigner.

Of great importance in connection with this subject, and in their bearing on the movements of currents in the Arctic seas, are the examinations of the drift-woods collected according to Dr. Petermann's instructions by the recent German expeditions to East Greenland, Spitzbergen, and the seas east of it. In the hands of well-known German botanists these numerous fragments of wood and bark prove to be chiefly of northern origin; the extreme thinness of the yearly rings in the section of the woods showing that their habitat has been on the outmost limits of tree growth. Larch is the most frequent, and the specimens of it are clearly traceable to Siberia. The pines may either be Asiatic or from Northern Europe. A few pieces examined are however undoubtedly of more southerly origin.

The Ruins of Zimbae in South Africa.—On September 5, 1871, the South African explorer Carl Mauch visited the ruins of an ancient and mysterious city in the highland between the Zambezi and Limpopo rivers, long known by native report to the Portuguese, and situated in a land which from its gold and ivory has long been identified by some authorities as the Ophir of Scripture. Letters describing the ruins are published in the *Mittheilungen*. Zimbae lies in about lat. 20° 14' S. long. 31° 48' E. One portion of the ruins rises upon a granite hill about 400 feet in relative height; the other, separated by a slight valley, lies upon a somewhat raised terrace. From the curved and zigzag form still apparent in the ruined walls which cover the whole of the western declivity of the hill, these have doubtless formed a once impregnable fortress. The whole space is densely overgrown with nettles and bushes, and some great trees have intertwined their roots with the buildings. Without exception the walls, some of which have still a height of 30 feet, are built of cut granite stones, generally of the size of an ordinary brick, but no mortar has been used. The thickness of the walls where they appear above ground is 10 feet, tapering to 7 or 8 feet above. In many places monolith pilasters of 8 to 10 feet in length, ornamented in diamond-shaped lines, stand out of the building. These are generally 1 inches wide and 3 inches in thickness, cut out of a hard and close stone a greenish-black colour, and having a metallic ring. During the first

hurried visit, Mauch was unable to find any traces of inscription, though carvings of unknown characters are mentioned by the early Portuguese writers. Such however may yet be found, and a clue be thus obtained as to the age of the strange edifice. Zimbae is in all probability an ancient factory, raised in very remote antiquity by strangers to the land, to overawe the savage inhabitants of the neighbouring country, and to serve as a depot for the gold and ivory which it affords. No native, mud-hut dwelling tribe could ever have conceived its erection.

Yellowstone National American Park.—Following a recommendation made by the Committee on Public Lands, the Congress of the United States has approved an Act by which a large area of country situated in the western territories of Montana and Wyoming is withdrawn from occupancy, settlement, or sale, and is dedicated and set apart for ever as a National Park or pleasure-ground. The region was first surveyed in 1871, by a party under the leadership of Dr. F. V. Hayden, United States geologist, and proved to contain groups of natural curiosities unequalled perhaps in any other portion of the globe. The reserved tract is a square of 55 miles by 65 miles (embracing an area comparable with that of Yorkshire), surrounding the head lakes of the Yellowstone and Madison rivers. Forest-covered spurs of the Rocky Mountains, of from 10,000 to 12,000 feet in elevation, hem the valleys in on every side, and are snow-covered on their summits throughout the year. The whole region has been within comparatively modern geological times the scene of the greatest volcanic activity of North America. Hot springs and geysers (compared with which those of Iceland are insignificant), thickly spread along the margins of the lakes and on the river banks, represent the last stages—the vents or escape-pipes—of these remarkable manifestations of internal force. "All these springs are adorned with decorations more beautiful than art ever conceived, and which have required thousands of years for the cunning hand of nature to form." On issuing from the lake the Yellowstone forms an upper and lower series of falls, and then enters a grand cañon, through which it rushes for upwards of ten miles. The park will be henceforth under the exclusive control of the Secretary of the Interior, who will as soon as practicable make arrangements for the preservation of its wonders, and their retention in their natural condition. The withdrawal of this tract from settlement will be regarded by the entire civilised world as a step of progress and an honour to the American nation.

Zoology.

Venomous Fish.—It is generally known that the wounds inflicted by the weeviers (*Trachinus*) of our coasts and by the sting-rays are rendered poisonous by a mucous excretion adhering to the spines of the head, back, and tail of these fishes; and a most perfect poison-organ, analogous to the poison-fang of snakes, was described some years ago by Dr. Günther in two fishes (*Thalassophryne*) from Central America. Dr. Le Juge has found at the Mauritius another still more dangerous kind of venomous fish; it was long known to ichthyologists under the name of *Synanceia verrucosa*, and is readily recognised by its monstrous appearance, the head being deeply pitted, and the body scaleless and covered with warts. It is by no means scarce, being found throughout the Indian Ocean, and known at the Mauritius as the "Lafie." There are thirteen spines in the dorsal fin, each provided at its base with a bag containing the poison, and with a pair of deep grooves along which the poison is guided to the wound. As in all the other fishes of this kind, the poison-apparatus is merely a weapon of defence, and comes into action when the fish is seized or trodden upon. The action of fish-poison upon the human organism appears to be less rapid than that of snakes; though patients who neglect to apply remedies similar to those used for snake-bites expose themselves to serious consequences, which may even terminate fatally. In one case a fisherman died on the third day from a severe wound. Dr. Le Juge mentions that the fishermen of Mauritius successfully apply poultices of the leaves of a composite plant, *Microrhynchus sarmentosus*. (*Transact. R. Soc. of Arts and Sciences of Mauritius*, 1871.)

Immigration of some Animals to Mauritius and Reunion.—Dr. Vinson reports that about five years ago a French ship, *Le Saint Charles*, Captain Leymarie, landed at Reunion a cargo of seedlings of the sugar-cane from Java. A kind of lizard, previously unknown in the island, was observed among the young plants; one of them was caught, while others escaped and scattered themselves about the neighbourhood, where they rapidly increased in numbers, and are at present perfectly naturalised. Dr. Vinson considered it to be the *Calotes versicolor*, which must however be a mistake, as this lizard is not found in Java; it is more probable that it is a species of *Bronchocole*, perhaps *B. cristatella*.—A fine butterfly (*Papilio demoleus*), a native of the east coast of Madagascar and Natal, made its appearance in Mauritius at the commencement of the year 1870, and since that date many specimens have been caught. Another butterfly, *Junonia rhadama*, from Madagascar, has become very common in the same island since the years 1857 or 1858, whilst others, such as *Vanessa cardui*, that were common

thirty or forty years ago, are now becoming more and more scarce. (*Transact. R. Soc. Maurit. 1871.*)

Fishes of China.—The twelfth volume of the *Verhandelingen der K. Akademie van Wetenschappen in Amsterdam* contains a very important memoir by the well-known Dutch ichthyologist, Dr. Bleeker, “*Sur les Cyprinoides de Chine.*” The author gives a list of some fifty species belonging to the family of *Cyprinidae* or carp-like fishes, which have been described by his predecessors; and he has been able to add about twenty more to this number, from collections made by the French travellers M. Daubry and the Abbé David on the Yantsekiang, and preserved in the Paris Museum. He expresses a belief that this number, great as it is, barely represents one-half of the Cyprinoids actually inhabiting the fresh waters of the Chinese Empire. The forms resemble rather Japanese and European types than those from tropical parts of Asia; but as our knowledge of the fish fauna of China increases, differences between the northern and southern parts will appear more definite. The memoir is beautifully illustrated by fifteen double plates, apparently representing the specimens of the natural size. The founder of Chinese ichthyology is unquestionably the late Sir John Richardson, who gave very detailed reports on the fishes collected in China by Vice-Admiral Sir Edward Belcher, and by Messrs. Reeves, father and son, the latter having supplemented their collections by a very valuable series of drawings. Their reports were published in the year 1843 or earlier; and it is a remarkable fact that no more recent collections of importance have been brought to England, although the number of English residents and travellers in China has increased greatly since that time.

The Skin of *Rhytina* forms the subject of an interesting treatise by Dr. A. Brandt in No. 7 of vol. xvii. of the *Mémoires de l'Académie imp. des Sciences de St.-Pétersbourg.* All hitherto known of the integuments of this extinct boreal Manatee is contained in Steller's account; he described them as rough and furrowed like the bark of a tree, whence the German name “Borkenthier.” The truth of what Steller had said is fully confirmed by the discovery of a piece of skin, found by Dr. Brandt amongst corals in store-room of the St. Petersburg Museum. A more minute examination has convinced the author that the rough appearance is caused by the ravages of a sea-louse (*Cyamus rhytinæ*) about an inch in length, which had lived parasitically in vast numbers on the animal's sides. Under normal conditions the skin of the whole body is smooth; this is evident from the circumstance that the skin of the back appears always to retain its smoothness; this part is frequently raised above the surface of the water, and the *Cyami* are unable to thrive when exposed to the air, while they are not unfrequently picked off by sea-birds. Bristle-like hairs are to be found over the entire body. The skin was greatly valued by fur-hunters in Kamtschatka for making a very durable and light sort of boat for crossing from one Aleutian island to another.—Dr. Murie has written some commentary notes on this treatise in *Ann. and Mag. Nat. Hist.* (April 1872). He does not entirely agree with Dr. Brandt as regards the cause of the roughness of the skin, thinking it probable that the skin was normally characterized by innumerable larger and smaller wavy grooves and ridges, and that the parasites could have caused but a limited amount of irritation.

New Theory of the Rattlesnake.—It has long been urged as an objection to the theory of natural selection that the tail-appendage of the rattlesnake must be injurious to the animal by attracting to it the notice of its enemies. Professor Shaler has however observed that the noise of the rattle is scarcely distinguishable from the sound made by an American species of Cicada; and he conjectures that the object of the rattle is to attract within reach of the snake the birds which naturally feed upon the Cicada. This he considers to be the explanation of the mode in which birds are seen to flutter round a rattlesnake, without calling into play the unreasonable theory of fascination. A formidable objection to the universality of the principle of natural selection is thus removed. Professor Shaler's paper will be found in the *American Naturalist* for January.

Another species of *Pedicularia*, a genus of Mollusks living parasitically on corals, has been discovered by M. Nobillard; he found it at Mauritius on an *Oculina*. (*Transact. R. Soc. Maurit. 1871.*)

The *Sitzungsbericht der Akademie der Wissenschaften in Wien* for 1871 contain the following zoological papers:—Vol. lxiii.: A. Manzoni, “Supplemento alla Fauna dei Bryozoi Mediterranei,” first contribution, pp. 73–82, with 3 plates; and J. L. Fitzinger, “A Synopsis of the Species of *Vespertilionidae*,” pp. 203–295, and of *Bradypterus*, pp. 331–405.—Vol. lxiv. (July) contains a Synopsis of the species of *Dasypterus*, by the same writer (pp. 209–276).

Botany.

The Geographical Distribution of Compositae.—Mr. G. Bentham read a paper on this subject at two recent meetings of the Linnean Society, in continuation of his paper on the structure of the same order of plants (*Academy*, vol. iii. p. 73). The genera and species of this largest order of flowering plants are about equally distributed between the Old

and New World; of the genera about 410 are found in the former and 430 in the latter; of species, about 4400 in the Old World and a rather larger number in the New. Not quite 70 species are common to the two hemispheres, and these mostly belong to the extreme northern regions; a few are common to New Zealand and Antarctic America; not more than a dozen tropical species are found in both the Old and New World, and some of these are coast plants. The form which Mr. Bentham looks on as prototypic, and possibly ancestral to the whole order, includes a few closely allied genera, distinguished by their regular corolla, belonging rather more to the American than the Old World distribution, being found in Chili, with an outlying genus in St. Helena. Other types, apparently of great antiquity, are found in Africa, Australia, and Western America. Since the separation of the Indo-Malayan and Australian regions from one another, there appears to have been a continuity of races of *Compositae* across the Tropics from south to north. The paper, which enters exhaustively into the distribution of the various tribes and more important genera, will be published in the *Journal of the Linnean Society*.

New Parasitic Plant of the Mistletoe Family.—Professor Asa Gray records in the *American Naturalist* for March the discovery in the State of New York of a new species of *Arcenthobium*, a small kind of mistletoe belonging to the order Loranthaceae. It was found in two localities parasitic in great abundance on a black spruce; the limbs of the trees affected were very much distorted, every twig bristling with the little parasite; and some trees seem to have died through its absorption of their sap. The curious part of the discovery is that a plant of this sort, growing on the boughs of the spruce trees in such quantity as to distort and even destroy them, and in three adjacent counties of a long and fully settled region, has been hitherto entirely overlooked; and then, when discovered, found about the same time by two independent observers at considerable distance from each other.

The Uses and Origin of the Arrangements of Leaves in Plants.—Dr. Chauncey Wright reprints from the *Memoirs of the American Academy* an elaborate and important paper bearing this title. The author's object is to attempt to explain, on the principle of natural selection, the existence of the modes of phyllotaxis most frequently actually found in nature. These consist of two principal general forms; the verticillate and the spiral, of which the latter is by far the most complicated. In the case of the spiral arrangement, the angle of divergence between the two leaves next to one another on the stem is expressed by the general form of the fraction

$$\frac{1}{a+1} \frac{1}{1+1} \frac{1}{1+1} &c. &c.$$

a being 1, 2, 3, or 4. It is found, however, that certain only of these fractions are met with in the spiral arrangement, while some of those are of much more frequent occurrence than others. An elaborate series of calculations has for its object to show that the particular forms of spiral arrangement actually found in nature are those which possess the greatest advantage for the plant by so arranging the leaves and branches that they have the most perfect distribution, so as not to interfere with one another in drawing nutriment both from the stem of the plant and the surrounding atmosphere.

A letter from Tübingen announces the death of Professor Hugo von Mohl, which occurred on the morning of the 1st of the present month. He was born at Stuttgart on the 8th April, 1805, the youngest of four celebrated brothers; and in 1835 became professor of botany and director of the botanic garden of the university of Tübingen; during the interval he has added greatly to our knowledge of vegetable physiology.

New Publications.

- ARBEITEN aus dem physiologischen Laboratorium der Würzburger Hochschule. Herausg. von A. Fick. Würzburg : Stahel.
- CLAUS, C. Die Metamorphose der Squilliden. Göttingen : Dietrich'sche Buchhandlung.
- CLEBSCH, A. Zum Gedächtniss an J. Plücker. Göttingen : Dietrich'sche Buchhandlung.
- DUBOIS, C. F. Planches coloriées des Oiseaux de l'Europe et de leurs Œufs. 106 livr. Brussels : Muquardt.
- FERRIÈRE, E. Le Darwinisme. Paris : Germer-Baillièvre.
- MÜLLER, Hermann. Anwendung der Darwin'schen Lehre auf Bienen. (Separat-Abdruck.) Bonn.
- NAVAL SCIENCE. No. I. Edited by E. J. Reed. Lockwood.
- ULRICH, W. Internationales Wörterbuch der Pflanzennamen. 4 Lieferung. Leipzig : Weissbach.
- WOLPERS, J. P. Newton's Mathematische Prinzipien der Naturlehre. Berlin : Oppenheim.

History.

The Decline of the Roman Republic. By George Long. Vol. IV.
London : Bell & Daldy. Cambridge : Deighton, Bell, and Co.

THE history of Rome after the Social War is so full of anomalies that we are certain to misconceive it when we try to represent it to ourselves by the help of analogies drawn from a comparatively normal state of things. We cannot resolve the chaos into a struggle between an impoverished populace and a corrupt oligarchy, which found its happiest issue, in the absence of a strong and healthy middle class, through the establishment of a democratic despotism : the empire had its democratic side ; but of all the emperors of the first two centuries, Nero was the only demagogue. Augustus, Tiberius, Domitian were conservative to the verge of reaction. The fact is, that after the slaughter of Gaius Gracchus the assembly was practically reduced to the condition of a puppet : it had been proved that the voters could not use their enormous powers so as permanently to better their own condition ; and yet those powers were in excess of their capacity, and they retained them unimpaired ; and after the restoration under Sulla the senate was a puppet too. Sulla saved the nobility, but he stultified them. It is clear from Cicero's early speeches that out of Rome the men of order were upon the whole on the side of Marius, in spite of his excesses, and that the following of Sulla contained a very large proportion of cosmopolitan adventurers. He filled up the senate with these : and throughout his reorganization of the state favoured the senate, but did nothing for the nobility as such. In fact it did much against them ; for the multiplication of quaestorships and praetorships was really a contrivance for pouring a constant stream of "new men" into the senate, for the great families of Rome were not fruitful. Both the senate and the assembly were instruments which might still be used with effect to decide the battle between the real forces of the time. Perhaps it would be hardly too much to say that the proximate cause of the collapse of the republic was that Caesar was confronted by a senate which had all the weakness, all the unpopularity, and none of the strength of a compact oligarchy.

It was this which paralysed Cicero, the only politician of the day who was at once loyal, public-spirited, and intelligent. His career was a series of real humiliations, chequered with pasteboard triumphs, because he neither did nor could observe the late Mr. Cobden's maxim to look at the force behind him as well as the end before him. He was always compromising his personal position for the public good and drawing back to save his personal position when he found he could not serve the public. This is the adequate explanation of his conduct about the Campanian domain ; in 56 B.C. Caesar, Pompeius, and Crassus had been drifting apart ; Pompeius was discredited, and the populace was inclined to set up Crassus against him. If the senate's *esprit de corps* had been stronger, if it had not been disgracefully weak, it was quite a feasible enterprise to break up the Campanian commission. As two hundred senators attended the congress of Lucca, it was useless for Cicero to press his motion ; but it is strange that a historian who expresses so few opinions as Mr. Long should blame him so strongly for making it. Mr. Long seems to write, if I may be pardoned for saying so, too much under the dominion of the common prejudice, that the three confederates were the effective rulers of the Roman empire ; it would be as reasonable to say that the empire was governed in the fifth century by the tribes of barbarians who were encamped within it. The confederates had an exceptional position in the state : they could carry most of their measures, but they were liable to occasional defeats ; they could not always protect their de-

pends. Important resolutions like the confiscation of Cyprus were carried through without consulting them ; much of the routine of administration went on without their interference. Mere city partisans were as important in politics as ever ; as Mr. Long points out, Cicero owed his restoration to the energy of Milo. It is quite possible that, if the senate had been patient, firm, and united—if Cicero had enjoyed the ascendancy of Lord Lyndhurst—the old constitution might have weathered the storms of another half-century, and that the final transformation which now seems inevitable might have been wholly different. Pompeius, who hankered after the monarchy, judged it impossible to reign in spite of the senate and nobility, or to extort their sanction : Caesar, who certainly regarded the senate and the nobility as an incubus upon the Roman world, was far from having determined to seize the monarchy for himself at the time of the congress of Lucca, unless we suppose that he had determined to betray his confederates.

For dealing with so confused a period, there are undeniable advantages in Mr. Long's method of writing history, though every volume renews our surprise and regret that a writer so industrious, so impartial, and so accurate should either not possess, or, possessing, should so completely and so pertinaciously suppress, the other qualities which it is natural to desire in a historian. Still a *précis* of all the evidence, however dry, is sure to bring something to light which writers of more insight leave in the shade. No other history gives quite sufficient prominence to the fact that after the congress of Lucca it was the influence of Caesar far more than of Pompeius which kept the senate quiet ; certainly none shows so clearly that the final rupture was due simply to the shortsighted, disloyal selfishness of Pompeius, who drifted himself and forced the senate into a ruinous conflict rather than give up the preposterous pretension of putting Caesar back in a position where he could patronise him.

The chapters on Roman affairs are not the largest part of the volume, but they are the most valuable and suggestive. It is difficult to see what purpose is served by translating all the notices of the Britons and Germans in ancient writers, even to their pragmatical remarks : if there are materials for constructing an intelligible picture of ancient British or German society, the writer should have done much more ; if there are not, it was hardly worth while to do so much. Mr. Long adheres to his former opinion that in both his invasions of Britain Caesar landed at Deal ; he regards it as an insoluble question whether he sailed from Wissant or Boulogne. He repeats more than once an enquiry, which is surely superfluous, as to where Caesar got his information about what Vercingetorix planned or said : he could question his other prisoners, he could question Vercingetorix, who was doubtless glad to talk. Mr. Long takes the execution of the Gallic leaders from Dion without comment or acknowledgment : he rejects the picturesque and theatrical details of his surrender, which are equally probable, and rest on the same authority. In general he scolds Dion whenever he goes beyond Caesar ; he follows him sulkily when he supplements Cicero ; it is after all only natural that such a painstaking writer should be irritated by Dion's peculiar kind of cleverness. Much use has been made for the Gallic campaigns of the topographical and other illustrations collected by the author of the *Histoire de César* and others. Mr. Long exercises an independent judgment upon previous writers ; but when he follows at all, he follows servilely : writing from the *Histoire de César*, he is led to speak of "the Auvergne;" writing from Hirtius, he is led to speak of Gallic customs in the present tense : the only Gallic name he has ventured to de-Latinise is Cominus, who, after a chapter or two, is cut down to Comin.

Droit Musulman. Recueil de Lois concernant les Musulmans Schyites.
Par A. Querry. Tome premier. Paris : Maisonneuve, 1871.

THE present book is composed mainly for practical purposes. The author, M. Querry, French consul at Tabriz, intends to provide for the wants of European agents residing in Muhammadan, and more specially in Shiite, countries by furnishing them with a complete *Corpus Juris Muslimici*. Speaking of the difficulties which this class of men frequently experience in consequence of their imperfect knowledge of Muhammadan law, he says: "These difficulties are particularly severe when between Europeans and natives there arises one of those differences which according to the treaties must be decided by the tribunals of the country. In Turkey the institution of the mixed tribunals has to some degree diminished these inconveniences; but in Persia there is no court of justice, and, since the matter of dispute is there always referred to the minister of foreign affairs, it happens frequently that the European agent finds it an embarrassing task to discuss or to refute an objection based on the law of the country." It must be stated, however, that there exists already a work which we consider as a reliable guide for our officials in the East in all such emergencies: we mean the compendium of Shia law by N. v. Tornauw. But as it is written in Russian or German, most of them will not be able to use it. In order to fill up this gap in literature, M. Querry has undertaken to translate a standard work on Shia law, without altering anything in its original order and without any omission. For this purpose he has chosen the *Shard'i-al'islâm* by Najm-aldîn Ja'far le-Alî Almuhakkik (who died A. H. 676), the most famous law-book in all Shiite countries. This first volume contains the first half in two books: I. the 'Ibâdât, in ten parts (purification, prayer, poor-rate, &c.); and II. the 'Ukûdât, in nineteen parts (sale, pawn, wills, marriages, &c.). The whole is very well arranged, being distributed in single paragraphs, in order to facilitate reference.

It does not seem to have come to the knowledge of the translator that a considerable portion of this work, the text of which was edited in Calcutta, 1839, has already been translated into a European language; at all events, he does not mention it in the preface. Of the eight books contained in Neil B. E. Baillie's *Digest of Moohummudan Law*, part ii. (see *Academy*, vol. ii. p. 318), the first seven are translated from the same *Shara'i-al'islâm*; the books 1, 4, 5, 6, occur already in this tome premier of M. Querry. Mr. Baillie selected those parts which are most important for Anglo-Indian lawyers and judges; he did not translate them in their entirety, but omitted such passages and portions which in his opinion served less the immediate purpose, whilst M. Querry translates the original as it is.

Comparing the two translations with each other, without having the text at hand, we are happy to say that on the whole they agree very closely, and that the one proves the accuracy of the other. Still, there are many differences, on the character of which it would not be possible to pronounce except on the authority of the Arabic text. If, for instance, the paragraphs in the law of marriage 55, 60, and certain passages in paragraphs 37, 38, 57, are wanting in Baillie's *Digest*, we cannot say whether he has omitted them or whether that copy from which M. Querry translated was interpolated. There are, however, differences of greater consequence, in fact, different interpretations of the same words. And nobody who ever tried to disentangle the intricacies of the style of Arabic lawyers will wonder that such things should happen even to men who are so well prepared for their task as Mr. Baillie and M. Querry. We may even go so far as to maintain that in certain cases, in consequence of the ambi-

guity of Arabic forms, it is impossible to find out with complete certainty the meaning of the author. If, for instance, he does not add an interrogative particle, how is one to know whether his words are to be interpreted in a positive or interrogative sense? And on such difference of interpretation the fortune and life of people may depend.

In the chapter of the treaty of marriage, Almuhakkik says on p. 647: "De même, si, le mandataire s'adressant au père de la femme en ces termes : 'J'ai épousé ta fille au nom d'un tel,' le père répond par *oui*, le mariage est valide." The same words are translated by Baillie (*Digest*, p. 3) in a somewhat different sense: "If one person should say to another, 'Hast thou married thy daughter to such an one?' and the person addressed should answer, 'Yes,' whereupon the husband should reply, 'I have accepted,' there would be a valid marriage."

M. Querry translates on p. 648, § 54: "Au cas, où, de deux personnes, l'une seulement déclarera être unie en mariage à la seconde, qui nie le fait, le mariage sera présumé valide dans les cas à la charge du déclarant, à l'exclusion de celui qui nie l'acte." The same passage is understood by Baillie (p. 5) thus: "If one of them should make such a declaration (that is, should declare to be married to some person who denies it), judgment for all the effects of the contract is to be given against him or her only, to the exclusion of the other."

In the law of wills, on p. 617, § 62, M. Querry translates: "Si le testateur a légué une somme quelconque sans désigner le légataire, le legs sera consacré à des œuvres générales de bienfaisance." This is quite irreconcilable with Mr. Baillie's translation (p. 238): "If a man should make a bequest for several purposes, of which the executor has forgotten one or more, he should dispose of it in some good or proper way."

If a person has bequeathed an undetermined part of his property, one interpretation assigns to the legatee the tenth of the third of the whole property. So, M. Querry (p. 617) quite correctly, because only one third of the property is at the free disposition of the testator; whilst, according to Mr. Baillie, one tenth of the testator's estate is assigned to the legatee. So there is a difference of $\frac{1}{10}$ and $\frac{1}{30}$.

We could give a very long list of similar discrepancies. Not having the original before us, we cannot judge who is right or wrong, but from this comparison it results of necessity that both translations are insufficient guarantees for a conscientious lawyer, if he does not consult the Arabic original in all cases on which the two translators diverge. There is a class of literature which is beyond the limits of the translator's skill, and we are very much inclined to reckon Muhammadan law-books as belonging to this class. They can be commented and transcribed, but at all events many of them, if not all, can never be translated.

The question, therefore, arises how to make a practical handbook of Muhammadan law for all those who want this knowledge, and who cannot study the Arabic originals. We should propose for this purpose to translate as well as possible some accredited text of the law, and to add copious extracts from numerous commentaries of good renown. We ought to adopt the system of the Arabs themselves, whose law-literature is nothing but *one* commentary. Thereby we should obtain two results: First, any lawyer not conversant with Arabic would be able to penetrate into the interpretation of the original as far as any Arabic philologist, European or native. And these commentaries *can*, in fact, be translated, because one helps to elucidate the other. Secondly, the student would become familiar with the Eastern mode of reasoning, with the methods of argumentation of the greatest lawyers of the East. This process may seem somewhat long, troublesome, and expensive, but we maintain that it is the

only one by which it would be possible to provide for all the wants of the most conscientious and scrupulous jurisdiction. The nearest approach to a handbook of this kind is Hamilton's *Hedaya*.

ED. SACHAU.

Intelligence, &c.

A new history of Russia, by Professor Bestushev Rumm, has been now published at St. Petersburg (Koshanchikov). The same has published a complete edition of the *Historical Monographies and Researches* of the famous writer and scholar (*in russicis*) Kostomorov, and many translations of great historical works (Motley, Louis Blanc, Tocqueville, &c.).

Altpreußische Monatsschrift, Jan.-Feb.—Lohmeyer shows that the "amberland" of which Pytheas, the early traveller from Marseilles, heard, was probably the Frisian coast and islands, and not the Prussian coast on the Baltic, which the Romans afterwards arrived at by an exploring expedition overland from Carnuntum (close to Vienna).—An account is given of the new MS. (found at Lemberg) of the *Chronicle of Oliva* (close to Danzig), which contains some interesting particulars of the Black Death in Edward III.'s time, the plague which changed the character of the middle ages.—A notice of the German translations of Dante follows.

New Publications.

HÖFNER, M. J. Untersuchungen zur Geschichte des Kaisers L. Septimi Severus und seiner Dynastie. Erster Band. 1. Abtheilung. Giessen : Kicker.

HOOK, W. F. Life of Archbishop Parker. (Lives of Archbishops of Canterbury.) Bentley.

MONUMENTA HISTORIAE WORMIENSIS. Bd. V. 1. Abth. Codex Diplomaticus Wormiensis. Hrsg. v. C. P. Woelky. Leipzig : Peter.

PUBLICATIONS DE LA SECTION HISTORIQUE de l'Institut royal grand-ducal de Luxembourg. Année 1870-71. Luxembourg : Bück.

RAABE, A. H. Geschichte u. Bild von Nero. Nach den Quellen bearbeitet. 1. Hlft. Utrecht : Kemink u. Zoon.

TISCHENDORF, P. A. v. Das Lehnwesen in den moslemischen Staaten, insbesondere im osmanischen Reiche. Leipzig : Giesecke u. Devrient.

URKUNDEN u. AKTENSTÜCKE zur Geschichte d. Kurfürsten Friedrich Wilhelms von Brandenburg. 6. Bd. Politische Verhandlungen. III. Hrsg. v. B. Erdmannsdörffer. Berlin : Reimer.

Philology.

Cornelii Taciti Germania. Erläutert von Dr. H. Schweizer-Sidler. Halle, 1871.

THIS very interesting edition is, as Dr. Schweizer-Sidler informs us in his preface, a forestalment, for the use of schools, of a more comprehensive revision of the *Germania*, intended to form part of a new edition of Orelli's *Tacitus*. Probably no living scholar is better fitted than Dr. Schweizer-Sidler for such a work, which requires a combination of the resources of exact Latin scholarship with those of Indo-Germanic philology and antiquities. The introduction is short, but not so short as to preclude the editor from expressing his inclination to attribute the *Dialogus de Oratoribus* to Tacitus (p. viii). With regard to the *Germania* he is (p. ix) perhaps not quite indulgent enough to the old theory that Tacitus intended it as a mirror in which his countrymen might behold and consider the vices of their own civilisation. It cannot, indeed, be proved that this was the exclusive or even a principal object of the work: but there is considerable internal evidence to show that such an idea was not absent from the historian's mind. As the style of Tacitus savours of poetry and declamatory exercises, so his views of law, politics, and morality, are often not so much those of a statesman as of a member of an embittered literary and philosophical coterie. In common with other eminent writers of his age, he was driven by circumstances to take up, more or less, the attitude of a satirist. Witness such scholastic observations as "aurum et argentum propitiue an irati di negaverint dubito" (*Germania*, 5); "faenus agitare et in usuras extendere ignotum, ideoque magis servatum quam si vetitum esset" (*ib.* 26). The remark at the end of c. 19,

"plusque ibi boni mores valent quam alibi bonae leges," gives the tone to much of the disquisition on the social and moral state of the Germans; and the chapters on marriage (19), on slavery (25), on interest (26), and on funerals (27), contain, as our editor himself acknowledges in his notes, much obvious innuendo.

The chief interest of the notes is the constant application to Tacitus' work of the latest results attained in the study of old German history, literature, and antiquities. Since the death of Jacob Grimm, the names of many scholars have been conspicuous in this field, notably those of Zeuss, Wilder, and Müllenhoff, of whose works Dr. Schweizer-Sidler has made considerable use, with great profit and interest to the reader of the *Germania*. Among the most interesting notes may be mentioned that on the homage paid to women by the Germans (c. 8); on the *comites* and the degrees of the *comitatus* (c. 13); on the words expressive of relationship (c. 20); and on the names of the seasons (c. 26). The difficult word *principes*, which Tacitus (not improbably from want of exact knowledge) seems to use vaguely, Dr. Schweizer-Sidler declines to take in so strict and limited a sense as was put upon it by Waitz. The *pagus* he thinks consisted, not of a hundred houses, but of a hundred *gentes*, each consisting of ten houses: see notes on cc. 7 and 12.

Something might, we think, be added to the notes in the way of interpretation and analysis of language. In c. 3, in the passage "sunt illis haec quoque carmina, quorum relatu . . . accendent animos," the editor suggests that "haec" may stand for "illa." But Tacitus, in c. 2, has been speaking of "carmina antiqua," the songs in which the records of the race are enshrined: do not the words "haec quoque carmina" refer by contrast to this passage? "They have these (martial) songs as well." In c. 7, "unde feminarum ululatus audiri, unde vagitus infantium," we do not see why "audiri" should not stand as historical infinitive, when Virgil, whom Tacitus is so fond of imitating, writes, "hinc exaudiri gemitus iraeque leonum" (*Aen.* 7, 15). If emendation be required, "audieris" would be a less violent change than "audias," to which the editor inclines. In c. 13, "haec dignitas, hae vires, magno semper electorum iuvenum globo circumdari, in pace decus, in bello praesidium;" and 16, "eosque (specus) multo insuper fimo onerant, suffugium hiemis et receptaculum frugibus," some notice is due to the construction of the cognate accusatives *decus* and *suffugium*, which, if we mistake not, is rare in Latin prose, and in any case requires explanation in a school edition.

We may further notice several poetical, if not strictly Virgilian, expressions scattered up and down the *Germania*, most of which have been overlooked both by Orelli and the present editor. Comp. c. 2, "Mannum, originem gentis," with Virgil, *Aen.* 12, 166, "Aeneas, Romanae stirpis origo;" c. 5, "silvis horrida," with *Aen.* 8, 348; c. 6, "missilia spargunt," with Virgil (copying from Ennius), *Aen.* 7, 687, 8, 695, &c.; c. 14, "bellatorem equum," with Virgil, *Georg.* 2, 145, &c.; c. 20, robora parentum liberi referunt," with Virgil's "invalidique patrum referunt ieunia nati," *Georg.* 3, 128 (is *referre* in this sense ante-Virgilian?); c. 29, "limite acto," with "ardens limitem agit ferro," *Aen.* 10, 514; the description of the goddess Herthus, in c. 40 ("invehi populis arbitrantur"), with the description of Cybele, *Aen.* 6, 785, "invehitur curru Phrygias turrita per urbes;" c. 44, "velis ministrantur," with "velis ministrat," *Aen.* 6, 302; and the curious periphrasis, "naturam sucini" (= *sucinum*), in c. 45, with Lucretius' "naturam inolentis olivi" (2, 850) = *olivum*.

We conclude with expressing a hope that Dr. Schweizer-Sidler will not confine his efforts to this edition, but will one day devote a work of wider scope to the treatment of the

general connection of the Latin language and antiquities with those of the other branches of the Indo-Germanic family.

H. NETTLESHIP.

Inscriptiones Hispaniae Christianae. Ed. Aemilius Hübner.
Berlin : Reimer, 1871.

THIS volume is, as will readily be inferred from its title, a corollary to the second volume of the Berlin *Corpus Inscriptionum*. Professor Hübner has conferred no slight benefit upon the public in proceeding so quickly from the larger to the smaller work. He has felt it his duty, he tells us in his preface, that the editor of the one should be the editor also of the other, and rightly judges that the collection will be a useful one, even though the inscriptions "do not contribute much to the advance of the study of Roman antiquities." This feeling deserves grateful recognition ; for he might not unnaturally have set aside these Christian monuments belonging to an obscure branch of mediaeval history, as alien from his own studies. In this case we might have had to wait for a long period before any such collection was made, and should hardly at any time have found an editor in whose sagacity in detecting the frauds that beset this subject and in whose complete knowledge of the material we could have reposed equal confidence. It would seem indeed almost impossible that this small volume can contain all the Christian inscriptions of Spain and Portugal up to the tenth or eleventh century, nor are the readings given in every instance incapable of amendment. Incompleteness and uncertainty are in fact defects incident to all such undertakings : but one constructed on a solid workmanlike plan such as the present will in the future only require addition and correction, and can never become obsolete.

Our readers will no doubt be glad to have some general outline of the volume, and some indication of the chief points of interest in it. Both these matters are dealt with clearly and succinctly in the preface, which seems intended, with the index, to supplement the otherwise rather too scanty notes.

The inscriptions follow in general the geographical order of the larger volume, but are not rich enough in number to require more than a division into three parts. The first, Lusitania, is represented by forty-four inscriptions; the second, Baetica, by ninety, while Tarragonensis, Asturia, and Galloacia have only sixty between them—the northern provinces being very scanty in their yield. Next follow a small number of inscribed tiles, bricks, and rings (*instrumenti domestici inscriptiones*). Then we have the *tituli recentiores* of the ninth and tenth centuries, with a few of the eleventh, and the *falsae vel suspectae* in two divisions, according as they claim the earlier or the later date. Lastly come the *indices* in numerous divisions, and a clear and very useful map marking accurately the relative positions of all the places represented in the text. As to this latter part, it is to be noted as a real want that there is no verbal index—a want, too, that very much mars the usefulness of the second volume of the *Corpus*. Without such a help it is often difficult to prove a positive conclusion, and almost impossible, however much we may wish it, to prove a negative. One might have hoped that the recognised utility of his verbal index to the volume edited by Professor Mommsen might have induced Professor Hübner to make these volumes of his own editing equally complete.

As to matter, sepulchral inscriptions—which are always the most numerous—here number three quarters of the whole. The rest chiefly record consecration of churches or the presence of certain relics. The few that remain belong in some way or other to church interiors, two only being

upon profane edifices. A few Greek and a few Jewish are scattered through the book. In point of *date* none are earlier than the fourth century, and of the earlier division about half are dated by the Spanish era, calculated to begin 38 B.C. Not only is the significance of this epoch obscure, but the meaning of the word and the way of writing it is disputed. It is stated (Orell. ii. p. 374) to be first found upon Christian inscriptions of the fifth century, and is almost always written *era*, though here we have once *iera* (No. 222, saec. x), and *aera* is sometimes found (No. 44, *aera* 548, and in four others of less certain genuineness). The oldest explanation suggested by Isidore (*Orig.* v. 36, 4) is as follows : "Aera singulorum annorum est constituta a Caesare Augusto, quando primum censum exegit ac Romanum orbem descripsit. Dicta autem aera eo quod omnis orbis aea reddere professus est reipublicae." This cannot be right, but the derivation from the plural of *aes*, used as a feminine singular in the sense of "item" and then "element of calculation," had long possession of the field, and is still defended by Wieseler (*Herzog, Encycl. Theol.* word *aera*). Ideeler, among others, has accepted the suggestion that connects it with the Gothic *jer*, the German *Jahr*, and our *year*. We should have been glad of Professor Hübner's own opinion on this point, and hope that he will think it worth his while to discuss it in a future number of the *Ephemeris Epigraphica*.

Of the *names* of persons mentioned in these inscriptions we have five classes, viz. ordinary, provincial, Greek, Biblical, and Gothic, &c. Of the provincial names, those peculiar to Spain seem to be *Aciscius*, *Armiger*, *Bracarius*, *Cerevella*, *Cuparius*, *Eburinus*, *Granniola*, *Lilliolus*, *Salvianella*. The first of these—the name of a well-known saint of Corduba—seems to represent the pick of a *fossor* or stone-cutter ; the others are not difficult to understand.

The *formulae*, of which we find in the preface a considerable list, do not show very remarkable divergence from those usual in other places. It would have been as well to notice that the phrase *accepta poenitentia* (33, 43, 54) means "having received absolution." It is remarkable amongst other smaller points that the term *requievit* belongs to Lusitania and the adjoining parts of Baetica, while *recessit* is almost confined to the rest of Baetica. The terms *famulus* (or *famula*) *Dei* or *Christi* are common throughout, but almost peculiar to, the Peninsula. Of *Scripture quotations* we have only two, the famous words of Job (xix. 25, 26 ; No. 95), *credo quod Redemptor meus vivet et in novissimo die de terra sussitabit pelem meam et in carne mea videbo Dominum* ; and the curious legend upon a gem, *os non cominuetis es eo* (No. 208 ; John xix. 36, cp. Exod. xii. 46). As to these, it should be remarked that the first agrees very little either with the old Latin or the Vulgate, though more like the latter. A similar epitaph is found in the cloisters of S. Paolo fuori le mura at Rome, which, like this, reads *Credo* and *Dominum* for the first and last words, but otherwise follows the Vulgate. The latter is the text of the Vulgate, where the old version has *confringetis [in eo] is a misprint for es or ex eo, praef. p. x]*. To the formula of prayer, *ut pro tuo promisso et sublibamine (i.e. sublevamine) mereamur ingredi paradisi ianue* (No. 96), should have been added the versicles, on a paten (*Auctarium*, p. 120, No. 230), which should, of course, be supplemented as below—

Da pacem Domine in diebus nostris quia non est alius qui pugnet pro nobis nisi tu Deus noster.

The *sepulchral poetry* is, as far as metre goes, worse even than the pagan of a late date. We have here some of the earliest known instances of rhymed or Leonine verse, the first of a certain date really rhymed being No. 123, *aera* 680, A.D. 642, though not mentioned in the preface. The first four lines will show the average character of the metre, which

here as elsewhere disregards accent only more rarely than quantity :

*Hæc card saxa—Oppilani continent membra
Claro nitre naldium — gestu abiisque conspicuum
O'pibus quippe pollens—et artuum vibribus cilens
Iacula vthi precipitur—predbque Baccels destindatur.*

So far it is possible to make a sort of accented verse, on the principle that no word may have more than one accent, or metrical ictus. But what can we make out of the following,

In procinctum belli necatur—opitulatione sodalium desolatur—?

We must only notice a few more points raised in the preface before proposing for consideration a few emendations in the text. The grammatical results which accrue from these inscriptions are not very striking. They certainly prove (as the editor remarks, p. xii) the non-existence of any supposed peculiar Spanish Latinity. There are traces even of a better orthography than might have been expected. Nevertheless, besides the ordinary depravations common at an earlier date, there are rather numerous instances of the palatal pronunciation, which according to Isidore may have begun first in Spain, and to which modern Spanish tongues are particularly adapted. Such are *baptidiatus*, *iudigsum*, *Scipriamus*, *septuazinta*, *sussitabit*, *Zacob*.

The number of unusual grammatical forms is not large. To those noticed in the preface and index we should add *annibus*, No. 139. The term *numero* = "in large numbers" was perhaps also worthy of remark, No. 140—

hic sunt reliquiae numero Sanctorum (n. n.) et aliorum numero Sanctorum.

In the appendix of *recentiores*—which appear to be separated on no very definite principle from the earlier ones—the form *Kal. Magii* for *Maii* (No. 258, aera 1077) might have been noticed. What, again, is *prilula* (No. 213, date A.D. 1000) in the line—

Piscator obiit prilula feritus—?

The following observations, amongst others, have occurred to me on a careful reading of the text of this volume. No. 125 (at Corduba), which Prof. Hübner finds obscure in parts, loses most of its difficulty if written out into the following incondite and incomplete hexameters:—



*Crux veneranda hominum redemptio semper,
In qua Christus pendens homines redemuit cunctos;
Teque ingestantes possident caelum.
Nunc melius gaudemus Christi morte redempti,
Dum caelum et paradisum Sina acipit homo.*

Teque ingestantes receives light from No. 268 *¶*, *crucis alme fero signu; fugie demon era (M)LXXXVIII* [here 1089 is a misprint for 1099]. *Paradisum Sina* would almost seem to be a confusion in the writer's mind for *Sion*.

No. 126 is a list of relics of saints in St. Peter's Church, also at Corduba. First come the names of the five martyrs referred to by Prudentius as the glory of that city, in his well-known hymn (*περὶ στεφάνων*, 4, *de martyribus Caesar-augustanis*)—

*Corduba Aciscum dabit et Zoellum
Tresque coronas—*

the three being Faustus, Janarius, and Martialis. Then follow three uncertain lines. In these the letters *RITA* and *CTT* appear to be readable. Instead of *CARITATIS* in the first, which is, I believe, unknown as the name of a saint, I would suggest *Leocritiae*, and in the second *Perfecti*—

both *Leocritia* and *Perfectus* being recognised as martyrs at Corduba, the first on March 15th, the second April 18th.

In connection with this, I would take No. 175 from Acci (Guadix), near the head of the Guadalquivir, as Corduba is about halfway down its course. Here, in deciphering a similar inscription, Prof. Hübner has not shown his usual acumen. He is puzzled by the name *Sti Babile*, though *St. Babylas*, Bishop of Antioch, will be familiar to all readers of St. Chrysostom, while others will remember that the scene which took place at the removal of his bones from the precinct of Apollo at Daphnae, at the order of the Emperor Julian, was no small element in the dissension between him and the excitable inhabitants of that city (Amm. Marc. xxii. 12, 13; Soz. H. E. v. 19, &c.). In the next column of the same (l. 7, 8), we should certainly read *F[austi] Januari et Martialis*, the "tres coronae" of Prudentius, and almost as certainly in the next line, *septe[m] dormientes in E[pheso]*, instead of the queer . . . *m dormiente sine e . . .*, though the change from genitive to accusative is a curious but not unexampled solecism (cp. the first lines of the epitaph of *Oppila* quoted above, No. 123). The next names are, of course, *Gervasi et Protasi* (not *Servasi* . . . *te*, &c.), the martyrs of Milan, unknown indeed in themselves, but famous for the miracles wrought at their translation by St. Ambrose—remarkable indeed as some of the best attested of ecclesiastical miracles (see, for instance, S. Aug. Conf. ix. 7). In their case, we may remark, as well as in that of St. Babylas, it was the translation which brought their relics into repute. In the next line but one we should probably supply *Ser[ge] Ferre[olus]*. The space will not admit of more than one name; and we know that two Ferreoli were honoured in the neighbouring province of Gaul, one at Vesuntio on June 16th, the other as patron of Vienne, whose rather striking "passio" may be read in Ruinart, ed. Ratisbon. p. 489 sq.

In No. 142 the sense might be restored by a better punctuation. I should propose to write—

*Hacc tenet urna tuum venerand(um) corpus Vincenti, abb(at)is,
Sei tua(m) sacra(m) tenet anima(m) caeleste sacerdos
Regnum, mutasti in melius cum gaudia vite,*

instead of making *caeleste sacerdos* a vocative. And in the next line—

*Martiris exempla signat quod membra sacra
Demonstrante Deo vatis hic repperit index,*

instead of *signant*—*A* being the monogram for *at*, and *NT* as in *demonstrante* for *ant*. *Exempla* is probably for *exemplar*, final *r* being not uncommonly lost in *late* Latin, as in *Marma* in the *Carmen Arvale* of the third century, *mate*, *pate*, *Alexande*, *soro*, *uxso*, &c. (Schuchardt, *Vok. d. Vulg-Lat.* ii. p. 390. I do not quote *Maio*, *Mino*, *censento*, *rogato*, from *early* Latin, as these seem rather to indicate a loss of final *s*.) The meaning is very obscure, but seems to be, "The poet's finger, after finding the sacred limbs by God's guidance, marks (by these lines) the martyr's example"—*signat* being used somewhat in the sense which it is in Virgil with regard to Caieta's burial-place,

*Et nunc servat honos sedem tuus, ossaque nomen
Hesperia in magna, si qua est ea gloria, signat.*

A little lower down we may punctuate—

*Sic simul officium finis vitamque removit,
Spiritus adveniens Domini quo tempore Sanctus
In regionem piam vexit animamque locabit.*

This part of the inscription seems to be an epitaph of the finder of the relics, apparently a priest of the church, whose bones are perhaps joined with those of St. Vincent in the next line, as efficacious in freeing from purgatorial fires—

Omnibus hiis mox est de flammis tollere flammis.

In the ring, No. 204, I would suggest KIPIW, as the interpretation of the curious monogram apparently on the seal or gem; cp. No. 149, l. 10—

Hic valeas Kirio sacrata ut altaria Christo.

In the later series, in No. 219 (an epitaph of Abbot Samson, aera 928), a note is wanted on the lines, which I would thus arrange—

*Cuius in urna manent hac sacra membra, inaula
Personat esperio illius famine fota.*

Here *inaula*, which the MS. copy rightly writes as one word, *ināla*, is a superfluous compound, meaning “nave of a church,” just like *inatrium* for *atrium*, *incurtis* for *curtis* (“court”), *indamnum*, &c., though I am not aware that *inaula* is elsewhere found.

The curious poetical touch, such as not rarely shines out in the midst of many a very commonplace epitaph, seems to mean, “Though he here lies buried, the church still rings with the doctrine of his native (*Esperio = Hispanico?*) eloquence.” A similar touch is found in the earlier and more metrical epitaph No. 165—

*Hunc cause meserum—hunc querunt vota dolentum
quos aluit semper voce manus lacrimis.*

In No. 239, in the monastery of St. Stephen de Riba de Sil, a few miles from Orense, is a very barbarous epitaph to a bishop who had turned monk, which thus begins—

*En quem cernis cavae saxa—tegel compago sacra
Presul Isauri—per omnia inlustrissimi viri.*

Cavea saxa is merely a modified form, of no particular gender, of *cava saxa* (No. 123), or *saxea cava* (No. 130), signifying a sarcophagus; and *compago sacra* appears to do duty for an accusative, as we might say, “the sacred frame;” but *Presul Isauri* should surely be *Presulis Auri*, or *Aurie*, i.e. Bishop of Orense; for the line below—

Sinens cathedra predicta—agglutinans se norma monastica

shows that the name of his see has been mentioned. *Auria* is the mediaeval Latin name of Orense, the *Amphilochia* of Strabo, and the *Aquae Calidae Cilinorum* of Ptolemy. Curiously enough, no notice of this place is taken under any of these names in Dr. Smith's *Dictionary of Ancient Geography*, and it would seem not to have occurred to Prof. Hübner.

These remarks will show that there is still something to be done for the text. Our space will not allow us to give any extended criticism of their historical data. English readers familiar with Mr. Foulkes' recent essays will be interested in two inscriptions connected with the name of Reccared. The first is from Toletum (*Toledo*), No. 155:—

† *In nomine dñi consecra | ta eclesia scte Marie | in catolico die pri-
die | idus Aprilis anno selti | citer primo regni dñi | nostri glorio-
sissimi Fl(avii) | Recaredi regis era DCXXV [A.D. 587].*

It is worth while to observe the date of the consecration and the position of this church. We must, no doubt, consider *die pridie* a pleonasm, as it occurs not unfrequently, e.g. Nos. 45, 120, 121, &c., and *in catolico* will then designate the Catholic as opposed to the Arian quarter. As to the date, Reccared began to reign in the preceding year 586, and immediately proceeded to make vigorous profession of the faith for which his brother Hermenegild had been a martyr (see Milman, *Lat. Christ.* bk. iii. ch. vii.). The famous third synod of Toledo, in which Spain generally became Catholic, did not indeed take place till 589; but Gregory of Tours has preserved the memory of an earlier synod held in this very year 587, at which the king declared his personal conviction, grounded particularly on the fact that miracles were worked by the Catholics and not by the Arians (*Hist. Franc.* ix. 15; Hefele, *Councils*, § 286). An event like this, probably taking place also at Toledo, would

be a natural occasion for such an effort as the dedication of a new cathedral. A similar inscription from Granada records the consecration of three churches, the last of which runs thus—

*Item consacrata est eclesia sc̄i Vincentii | Martyris Valentini(a) a sco
Lilliolo Accitano ponſe | xi Kal. Feb. an. VIII gl. dñi Recaredi regis er.
DCXXXII [A.D. 594].*

*Hec sca tria tabernacula in gloriam Trinitatis [indivise] cohoperantib⁹
sc̄is aedificata sunt ab inl. Gudiliu[va!...] | cum operarios vernulos et
sumptu proprio.*

This is another not uninteresting evidence of the impetus given to the Catholic party under Reccared's rule. The word *indivise* (or *indvise?*), which Prof. Hübner has failed to conjecture, seems clearly suggested by the broken letters of his facsimile—a proof, if any were wanted, of the usefulness of such aids.

We must now take leave of this interesting volume. We cannot help hoping that in a future edition a verbal index will be added, and that some one learned in Spanish church history will take the trouble to collect whatever still remains unedited, and to add illustrations such as a detailed study of the martyrologies and histories of councils would abundantly supply.

JOHN WORDSWORTH.

The Funeral Inscriptions of Attica. [*ΑΤΤΙΚΗΣ ἐπιγραφαὶ
ἐπετέμβοιο ἐκδιδόμεναι ὑπὸ Στεφάνου Αθ. Κουμανούδη.*] Athens: 1871.

PROFESSOR KUMANUDES has long been known as one of the most active and accurate of Athenian archæologists. The present work cannot be more suitably praised than by placing it in the same rank with Professor Michaelis' recent work, *Der Parthenon*, as a model of clear and compact arrangement of a large mass of material. Boeckh's *Corpus Inscr. Graec.* contained hardly 500 Attic funeral inscriptions, and very few of these had been seen by Boeckh himself: the present work contains nearly 4000, a large proportion of them (those marked by an asterisk) being edited from the personal examination of the writer. An introduction is prefixed, which, besides being a treatise on Athenian sepulchral monuments, contains also an explanation of the editor's aim and method. He tells us that in printing all the inscriptions in cursive Greek only his purpose is to render the book as inexpensive and accessible as may be. He considers no uncial text short of an actual facsimile of the stone to be worth the additional expenditure of space and of trouble: he urges the wider employment of facsimiles, which are of the highest importance, in works of a more sumptuous character, and for a different class of readers. One cannot but sympathise with this view; and yet the orthography of the old Attic alphabet can scarcely be represented without uncials: *τυχέν* (= *TYXEN* = *τυχεῖν*), *ἀρέψ* (= *ANEP* = *ἀρήψ*) are novelties to which the eye does not easily become reconciled. Moreover, uncial copies are useful in representing mis-spellings and other mistakes of the sculptor; and it is surely possible, as the work of MM. Le Bas and Waddington especially shows (*Voyage archéologique*), to employ such a variety of uncial type as shall fairly represent to the reader the successive changes and local peculiarities of Greek palaeography.

The number of inscriptions discovered of late years in Attica (to look no wider) is enormous, and it will take time to bring them all together in a new *Corpus*. As a contribution to that end, Prof. Kumanudes puts forth this collection of all known Attic funeral inscriptions. He arranges them in nine classes: (1) Epitaphs of soldiers slain in battle, and honoured with a public funeral; (2) Epitaphs

of Attic demesmen, arranged in the alphabetical order of the demes, and within each deme in the alphabetical order of the names of the dead; (3) Epitaphs of *ἰωρελεῖς*; (4) Boundary-marks (*ὅροι*) of tombs; (5) Epitaphs of foreigners resident in Attica; and (6) of persons whose nationality is not discoverable; (7) Metrical epitaphs wherein an injury to the monument has effaced the name of the dead; (8) Christian epitaphs, which curiously enough never mention the nationality of the departed, possibly in view of a heavenly citizenship; (9) Fragments; to which are added all the Latin funeral inscriptions as yet discovered in Attica, and their number is strikingly few as compared with other parts of the Graeco-Roman world. The editor's Prolegomena are very interesting. His remarks on the orthography, punctuation, and especially on the restoration of Greek inscriptions, are thoroughly sound: so are those on the present state of archaeology in Greece. It is gratifying to find a Greek telling his countrymen some home-truths, and confessing that even Lord Elgin's dismantling of the Parthenon has but been the means of multiplying a hundred-fold the layers of Greek antiquities. The most valuable portion of the Prolegomena is an account of the various kinds of Attic tombstones—*στῆλαι*, slabs, pillars, &c. This is too full to be more than referred to here: enough to state that Prof. Kumanudes has made a valuable addition to what had already been done for this subject by Baron Stackelberg's splendid work (*Die Gräber der Hellenen*, Berlin, 1837); by Friedländer (*De Operibus anaglyphis in monumentis sepulchralibus Graecis*, Regium Bov. 1847); and by Pervanoglu's useful treatise (*Die Grabsteine der alten Griechen*, Leipzig, 1863).

Passing to the body of the work, we find that to each inscription is prefixed (wherever possible) a notice of the shape of the monument, of the kind of marble composing it, the place where it was discovered, the works in which the inscription has been published, its probable date, and the place where the monument at present may be found. Beyond these references there is but little in the way of commentary, excepting occasional foot-notes on matters of importance. Thus on p. 243 is a note confirming the opinion that the frequent occurrence of the graves of Milesians in Attica affords no ground for supposing a Milesian deme. The editor remarks of this class (1) that he scarcely finds 20 that are anterior to the Roman period; (2) that the epitaphs of females are far more numerous than of males (144 to 96); (3) that these monuments are found not only in the vicinity of Athens, but also in various more distant demes.

This general absence of commentary would be possible only in the case of funeral inscriptions, which present few occasions for individual remark: and the general conclusions which the editor has gathered from his extensive study of this class of monuments have been thrown by him into the Prolegomena. Such are his remarks (p. 17) on the disputed meaning of the vase often sculptured on Attic tombstones: we are gratified to find him establishing conclusively that this symbol does imply that the person buried below died unmarried. In a note on p. 18 he states that the common formulas *χρηστός* (*χρηστή*), *χαῖρε*, or *χρηστὲ χαῖρε*, are never found upon the graves of any Attic demesmen; and that even on those of strangers buried in Attica the expression (elsewhere so common) *χρηστὲ* (*χρηστή*) καὶ ἀλυπέ (or *φιλόστοργε*) *χαῖρε*, never once occurs. On p. 19 various mis-statements are corrected respecting the manner in which the wives and daughters of Attic citizens are designated upon tombs; and again (p. 20) he demurs to the hasty opinions which have been ventured respecting the banquet-scenes so often represented in relief upon Greek funeral monuments. We are glad to see a

severe stricture upon M. Lenormant (pp. 48 and 99) recalled in the appendix (p. 446).

The type and paper are such as appear to be usual in Athenian publications, but they are scarcely worthy of the book. The printing is usually correct, but in No. 9, l. 2, the omission of the word *φίλην* spoils the hexameter. The alphabetical arrangement employed throughout renders reference easy: two useful indices, however, are appended, one of matters worthy of remark, the other of geographical names. Of the 174 demes (the number given by Strabo), 127 are here to be found mentioned; of the 47 which remain, at least 23 are known to us from other inscriptions or from ancient authors (p. 458). E. L. HICKS.

Demosthenes de Corona: with English Notes. By the Rev. Arthur Holmes, M.A. Rivingtons, 1871.

THIS edition of the masterpiece of Demosthenes reflects credit on the editor of the *Catena Classicorum*, and will be very useful to students, for whom a good commentary on the oration, within a reasonable compass, has long been wanted; in spite of the somewhat exaggerated compliments paid by Mr. Holmes to his predecessors. The plan of the book is good, embracing so much prefatory history as is necessary for the comprehension of the speech, with a clear and vigorous review of its general character, and notes long enough, as a rule, to make the orator's meaning clear without embarrassing the student by undue prolixity.

Mr. Holmes has a genuine admiration both for the character and the oratory of his author. Upholding the perfect honesty of his policy, he even defends him from the common charge of deviation from truth in the course of this speech, maintaining that it would have been absurd in Demosthenes to attempt to deceive his audience by palpable falsehoods. His theory is that both the antagonists, to suit the critical and artificial taste of their audience, had recourse to quibbles, but not to absolute falsehoods: Aeschines raking up clauses of laws practically if not actually obsolete; and Demosthenes answering him by quoting equally obsolete clauses of exceptions and exemptions. His occasional bad taste and coarseness Mr. Holmes very fairly attributes to the general decadence of the age, rendering it necessary that he should in some degree accommodate his style to the low calibre of the Athenian courts of justice.

The notes do not profess to deal with varieties of reading, except where they materially affect the sense of any passage; but such exceptions might with advantage have been a little multiplied. An instance of this is found in the well-known passage where Demosthenes protests against the general virulence and unfairness of Aeschines' proceedings (§§ 12-16): on which, however, Mr. Holmes' comment is on the whole deserving of the highest praise. He grasps its meaning, thoroughly explains the somewhat complicated connection, and translates vigorously and correctly; but in the last clause of § 13 he entirely ignores the variety of punctuation, *ἐμὲ δὲ εἴπερ ἐξελέγειν ἐνόμιζεν, αὐτὸν οὐκ ἀνέγράψατο*, which, though probably wrong, is adopted by Dissen, and is the more worth noting as it entirely changes the meaning of a very difficult passage. On § 65 he is again silent as to a probable error of Dissen's, in defending the very weak interpolation of *οὐκ*, which Mr. Holmes says is supported by no editor but Reiske. In § 220 he adopts the reading *χώρα*, in spite of its acknowledged difficulty, without any mention either of the alternation *ῶρα*, found in several MSS., or of Schäfer's conjecture, *ῶρα*, which is supported by Dissen. In § 221 the reading *μηδὲν παραλείπων* might with advantage have been noticed; and in § 228 we miss all allusion to the old reading *ὑμᾶς ὑπάρχειν ἔγνωσμάνους*,

which is found in almost all the MSS., though necessitating an unparalleled interpretation of ἔγωσμένους.

In the explanatory notes some similar omissions are noticeable. In § 28 the expression ἐν τοῖς διοῖν ὄβολοῖν is explained at almost unnecessary length, but no clue is given as to what is much more difficult to understand—the exact meaning of the clause in which it stands, and whether it is to be attributed to Demosthenes or his opponent; whether it expresses the insignificance of the whole question, or raises a supposed objection that Demosthenes was crippling the revenues of the state, by depriving it of the two obols which these ambassadors would each have paid for entrance. In § 130, οὐδὲ γὰρ ὁν ἔτυχεν ἦν, though rightly explained, is a sufficiently remarkable attraction to call for grammatical analysis. So in § 135, the genitive absolute, referring to the direct object of a transitive verb, seems worthy of a note; and in § 262 Schäfer is somewhat misrepresented as misinterpreting the passage, since his explanation, that Aeschines was thrashed for robbing orchards, really rests upon a different reading, which Mr. Holmes ignores, ὥσπερ διπορώντς ἑκίνος ἐκ τῶν ἀλλοτρίων χωρίων; which entirely changes the force of the allusion. There are also several technical words on which a word or two of explanation would have been of use, such as χρηματίζειν, ἔηγ καὶ νέη, βακτηρία, σύμβολον, while, considering the important bearing of the subject on the speech, a somewhat fuller account of the whole system of the trierarchy could not have been considered out of place.

Of actual mistakes very few instances have been detected. We cannot but think that in § 198 Mr. Holmes has missed the meaning of ἐνεδοκιμεῖν, which may be compared with ἐνεδαιμονῆσαι and ἐντελευτῆσαι in Thuc. ii. 44; so that it should be rendered not “as regards reputation,” but “the man by whom the misfortunes of Athens were set apart as a field wherein to gain glory for himself.” In § 219 ἀναφορὰ is probably not “something to fall back upon,” but “room for throwing the blame on some one else.” And this would have been apparent from the parallel quoted by Mr. Holmes himself from Aeschines, had he given it in its integrity. In § 259 there seems no reason to suppose that νεβρίσκων contains any idea of Aeschines’ wearing the fawn-skin himself, as that was a dignity (see below, § 265) to which he had scarcely attained. And on § 195 Mr. Holmes assigns no reason for rejecting Schäfer’s very adequate interpretation of ἡγε μηδὲ πεύραν ἔδωκε, whereby ἡγε is made the subject: “Quae nec usum sui dederunt.” These, however, are but pardonable blots in a really good edition of the speech, and we may look with satisfaction on the other hand not only to a careful digest of previous commentaries, but to several new and valuable suggestions; such as that in γέρρα ἐνεπίμπρασαν in § 169 we may see a burning of the hurdles that fenced in the ordinary space for the popular assembly, as the speediest method of preparing for a monster meeting. It is also right to draw attention to the careful analysis of the meaning of the various particles throughout the speech.

J. R. KING.

Machberoth Ithiel, by Jehudah ben Shelomoh Alcharizi. Edited from the MS. in the Bodleian Library, by Thomas Chenery, M.A. Williams and Norgate.

YHUDAH EL-HARIZI was the last of that splendid galaxy of Hebrew poets in Spain to which Gabirol, Yhudah hal-Levy, and the two ben Ezras also belonged. He was the author of an imitation of the Maqāmat of el-Hariri, under the title of Tahk'moni, and previously to this of a Hebrew translation of the same work. Any one who has the slightest knowledge of *Hariri* in the original, or even of Rückert’s masterly German adaptation, will appreciate the difficulties encountered

by him in this translation. Professor Chenery, of Oxford, observes with great justice in the preface (p. ix):—

“The contest is not a fair one. The Hebrew language cannot rival the Arabic in the latter’s own dominion. That high-flown metaphorical diction, which has become so associated with Arabic composition that it does not offend even European scholars, educated to a more severe taste, surprises rather than gratifies when it is attempted in the language of the Bible. As a literary feat Alcharizi’s composition in this book is marvellous.”

The late Silvestre de Sacy, in his edition of *Hariri*, passed a high eulogium on Harizi’s translation, and published one of the chapters as a specimen. Only three other chapters have been published since his time. The present editor presents us with the twenty-seven Maqāmat contained in the Bodleian MS., in which, however, the commencement of the first is wanting. The MS. is written in rather careless Yemen characters, and is in many places pale and defective. Probably few scholars but Prof. Chenery, whose translation of the first part of the Maqāmat is well-known to Arabic students, would have attempted the delicate task of deciphering it. It is certainly not an easy piece of Hebrew composition. The poetical passages, and the abundant synonyms, may cause perplexity to the ordinary student, especially as the text is only pointed in a very few cases. Foot-notes, at least in the most difficult passages, would not have been out of place.

There are two prefaces, an English and a Hebrew. In the former, the editor gives a sketch of Harizi’s life and works, with references to the biographical authorities. In the latter, which is really a fine piece of style, an attempt is made to fix the period when Jewish writers adopted the Arabic metres. There is one passage in it (see p. 11) which sounds like an echo from the times of Harizi, where the editor chastises in severe terms “the rich men” (Jews?) of England, whose only aim is material pleasure, and who completely neglect a literature which cannot enrich them. May it not be a *vox clamantis in deserto*!

AD. NEUBAUER.

Intelligence.

The notices of lectures to be given at the university of Strasburg in the term beginning on May 1 include one by Professor Max Müller, of Oxford, who “will be so kind as to lecture in the summer semester on the ‘Results of Comparative Philology.’” MM. E. Reuss and Heitz, of Strasburg, and Laqueur, of Lyons, have also consented to lecture, as well as some professors of the former Faculté de Médecine. Fifteen hundred students are said to have already inscribed their names.

The German Philological Congress is announced to take place at Leipzig at the latter end of May.

The Russian *Journal of Public Instruction* (*Journal Ministerstva Narodnago Prosvetchenia*) is now publishing a critical study on Persius’ *Satire*, with the Latin text, a Russian translation, and a very complete commentary.

New Publications.

- ASCOLI, G. J. Vorträge üb. Glottologie. 1. Bd. Uebers. von Prof. Bazzigher u. Schweizer-Sidler. Halle : Buchh. d. Waisenb.
- BIBLIA veteris Testamenti Aethiopica. Ed. Dillmann. Tom. ii. fasc. ii. quo continentur libri regum iii. et iv. Leipzig : Brockhaus’ Sort.
- GOLDZIHER, Ign. Zur Charakteristik Geläl ud-din us-Sujūti’s u. seiner literarischen Tätigkeit. Wien : Gerold’s Sohn in Comm.
- HERST, W. Johann Heinrich Voss. Bd. I. Teubner.
- LEPSIUS, C. R. Die Metalle in den aegypt. Inschriften. Berlin : Dümmler in Comm.
- PRAETORIUS, F. Grammatik der Tigriffasprache in Abessinien. 2. Hälfte. Halle : Buchh. d. Waisenb.
- UNGER, R. Emendationes Horatiana. Halle : Pfeffer.
- WOLFF, M. Muhammedanische Eschatologie. Leipzig : Brockhaus in Comm.

ERRATUM IN No. 45.

Page 129 (a), line 52, after “xx. 17–38,” insert “xxi. 10–24, xxvii. 3 (ὑλαθρόποντας ε. τ. λ.), 21–26.”

THE ACADEMY.

"INTER SILVAS ACADEMI QUARERER VERUM."

Vol. III.—No. 47.

Readers are reminded that the mention of New Books, Articles, &c., in our lists is intended as a guarantee of their importance. The Editor of THE ACADEMY cannot undertake to return communications which are not asked for. The next number will be published on Wednesday, May 15, and Advertisements should be sent in by May 11.

General Literature.

GOETHE AND HIS MOTHER.

W. Goethe. *Les Œuvres expliquées par la Vie. 1749-1795.* Par A. Mézières. Didier et Cie, 1872.
Frau Rath. *Briefwechsel von Katharina Elisabeth Goethe.* Von Robert Keil. F. A. Brockhaus, 1871.

It cannot be said that either of these recent contributions to the mass of Goethe literature adds materially to our knowledge of the poet or his surroundings. M. Mézières' book is pleasant to read, clearly conceived, lucidly expressed, and touches with intelligent sympathy upon a variety of points which possess an inexhaustible interest for the students of Goethe's writings. But the main idea of the work, so far from being new, is one which English and German biographers have worn, if anything, rather too threadbare, and it would have been more original to collect the purely imaginary characters and episodes in Goethe's poems than to arrange once more his life and writings in parallel columns with the familiar passage from *Wahrheit und Dichtung* as a motto. The other publication is tantalizing in a different way; the writer has some valuable new matter to communicate, and there was useful work cut out for an editor in collecting and arranging all that had already been published in scattered and inaccessible periodicals, &c. relating to or from the hand of the most *genialisch* of women. Unfortunately Herr Keil has trusted to the inherent interest of his subject and to the fact that he had some new letters from and to Frau Goethe to communicate; and he has simply not edited the book at all. He has reprinted some of the letters which were already known, but not all; he has printed new ones without giving an account of how they came into his possession, though he must have been aware of the importance of an authentic pedigree for the MS. letters, since he denounces those published by Bettina Brentano as in the main presumable forgeries; and, finally, he has not been enabled to give his work the completeness which it is certainly time for it to receive, if ever, by incorporating all the letters of his heroine which are known to exist, as, for instance, her very interesting correspondence with Lavater.

About Goethe's childhood and youth, Margaret and the *Mitschuldigen*, Aennchen and *Die Launen der Verliebten*, M. Mézières does not attempt to say anything new, for the simple reason that there is nothing to be said. The Sesenheim episode—the desertion of Friederika and the reflection of Goethe's self-reproach in the picture of Marie and Weislingen in *Götz von Berlichingen*—naturally introduces his judgment on the degree of blame which attaches to the poet who so often "loved and rode away," and on what is called Goethe's egotism in general. M. Mézières compares the stoicism with which he closed his heart against Friederika's tears to that with which he compelled himself to ascend the

VOL. III.—NO. 47.

spire of Strasburg Cathedral and to witness surgical operations. "S'il paraît quelquefois très-dur pour ceux qui se sont attachés à lui, il a commencé par être plus dur encore pour lui-même." This side of his character is not exactly hard to understand, and yet it is almost a psychological paradox that, after going out of his way to suffer acute nervous pain of one kind in order to deaden his acutely painful sensibility, he should yet be able at once and without practice to face the immediate moral suffering of a separation from Friederika, when he had but to be faithful to her to secure the quiet mind which he started by preferring to the ease and comfort of the moment. In fact Goethe's stoical conduct was the logical consequence of his Epicurean tastes. He would bear pain for the sake of learning not to mind it, or in order to escape the danger of it at a future time; Kästner wrote of him a little later: "He has strong affections, but great command over them;" and it is by the strength of his affections only that the degree of his self-command is measured when that self-command is alleged as a proof of his coldness of heart. M. Mézières, who, like most of his biographers, has rather a *tendre* for Friederika, does not excuse his treatment of her, but he thinks a prophetic instinct made her lover choose rather to be true to his real and stable self, to the Goethe of the Memoirs, than to any of the charming girls towards whom, as has often been pointed out, the Goethe of the Memoirs is really as cold as the youth of Frankfort and Strasburg tried to be. The story of the real and the ideal Lotte is pleasingly told, and the artistic merits of *Werther* as a romance appreciatively set forth: it is also plausibly suggested that as much of the relations between Albert and Lotte as is unjust to Kästner may be borrowed from Goethe's experience of another *ménage*, that of Maximiliane de la Roche (Bettina's mother) and Brentano, in which he also played the dangerous part of supernumerary in a matrimonial duet.

In explaining his works from his life there is a certain temptation to give undue prominence to the works which can over those which cannot be so explained; and it may be thought that M. Mézières dwells in consequence too long upon both Clavijo and Stella; the former from the autobiographical point of view is only a replica of Weislingen with another Marie very like the first, but the poet seems to be more nearly reconciled to himself, as he allows Carlos to make out a very strong case in favour of prudential selfishness. In *Stella*, where Mr. Lewes failed to discover any biographical element, M. Mézières detects an exposition of the drawbacks to marriage in the abstract suggested by the author's proposed marriage with Fräulein Schönenmann (Lili). Again, unlike Mr. Lewes, he believes Lili to have been the object of a serious passion, and all the more on that account is he obliged to magnify Goethe's reluctance to make a final sacrifice of his liberty. He treats the extremely accommodating principles of all the ladies in the play and some of their remarks, which are unmotived, if not actually out of character, as expressing or illustrating the writer's own view that constancy was a virtue—in women. But taken in connection with the poet's actual personal experience, there is another view possible. The husband in *Stella* is the same as Weislingen and Clavijo, only his desertion takes place after marriage instead of before, and the piece may almost be read as a justification of Goethe and his other heroes for refusing to put themselves in a position where the temptation to a worse offence than their own might have become irresistible. In *Iphigenia* and *Tasso*, M. Mézières tries, but without much success, to recognise the portraiture of Frau von Stein, the ruling influence in Goethe's life when they were commenced. In the latter work alone something of Goethe's surroundings may be

traced; the court of Weimar has lent some of its features to that of Ferrara, but Goethe's relationship to it at a time when he writes calmly to his mother that the best proof of his contentment with his situation is that he cannot even imagine one for which he would exchange it, is very unlike that of his melancholic hero; and though Frau von Stein was obdurate, she was not, like Eleonora, on a pinnacle of earthly greatness beyond his reach. Of course just then Goethe and Tasso made love in similar language, and before his flight into Italy Goethe was in a depressed, agitated mood which could be idealised into something befitting real misfortunes, but something more than this is meant in the cases where his works are manifestly "parts of a long confession," and if *Torquato Tasso* in any sense represents the emotions of the first Weimar period, it is not Goethe's love for Frau von Stein, but his love and longing for Italy, for art, for more light and harmony in his self-consciousness, that are shadowed forth in his hero's sighs.

M. Mézières very wisely declines to enter into unprofitable speculations as to what would have been the effect on Goethe's writings if he had not gone to Weimar, but the natural order of his book calls attention to the comparative cessation of the productive impulse before the Italian journey, and to its altered direction immediately afterwards, both of which facts it would have been within his province to explain; the rather that his conception of Goethe's character does not exclude a regret—the only regret possible in the face of his colossal achievements—that the fixed convictions and principles of art which he brought back from Italy had not been reached before the wild inspired madness of the young man "Goethe or the Devil" had burnt away half its strength. *Wilhelm Meister* and *Faust*, in which the two Goethes are most nearly one, do not come into the present volume, a sacrifice in some ways to chronological method, for their biographical interest is of course connected with the date when separate passages were composed, not when the complete work was published. Amongst the poems inspired by Christiane Vulpius, M. Mézières omits to mention *Der neue Pausias*, a graceful tribute to her original profession; and he is perhaps rather inclined to over-estimate the depth of the passion with which she inspired Goethe, for the unusual tone of sincerity and *abandon* in the poems of this date may be explained as showing, not that the feeling to be expressed was stronger than before, but that the poet was no longer afraid of being mastered by it if he admitted its strength. Of the subsequent marriage, M. Mézières, who is always on the side of morality, simply says, "Il aurait mieux fait de commencer par là."

The Frau Räthin, Goethe's mother—Frau Aja, as her correspondents prefer to call her—occupied a larger space in the German literary world than is generally recognised. She was not merely the mother of her son, she was the woman who explained to his admirers how such a man could come into being; her house is the place of pilgrimage—*Casa Santa* is its regular name in the letters—for all that is illustrious, by birth or intelligence, throughout Germany. No man, woman, or child has ever left her presence with a discontented face; and many a celebrity who had been gradually repelled from the more exacting personality of the son remained through life on a footing of filial friendship and devotion to the mother. The writing-desk which she clears out once a month, and never without laughing, is "like heaven, all class distinctions are done away with in it; high and low, the pious and publicans and sinners, all form one heap. The good Lavater's letter lies quite peaceably by the actor Grossmann's, and so on." She has a certain round table, of which the fame seems to show that she neglected none of the material aids to social success;

and her phrase, the "tyrant's blood," for the good Rhenish vintages shed for her guests, met with a wide acceptance equally flattering to her invention and its subject. She seems to have possessed at once and by nature the Olympian serenity of mind which Wolfgang only conquered after many struggles and conflicts, in which, perhaps, just the tenderest bloom was knocked off his moral sensibility. Both were resolved to make whatever sacrifices were necessary to keep their minds clear and their imaginations untroubled by ugly visions, but Frau Aja somehow never found it necessary to sacrifice anything that even looked like a duty to a friend to this paramount duty to herself. The characteristic trait noticed by Mr. Lewes, that her servants were forbidden to tell her bad news, even if it were true, for she was sure to hear of it soon enough, is remarkable as the exact opposite of the animal curiosity which develops into the *Schadenfreude* of (generally feminine) gossips; and the remarks that follow on the danger of *coddling* the mind are a degree further from being applicable to the mother than to the son; there was a degree less of conscious effort in her conduct, though the object kept in view by both was identical, viz. to avoid mental suffering as a simply unprofitable distraction.

There are many signs in the correspondence that Frau Aja's intellectual gifts were held in as high esteem as her unalterable good humour. The Grand-duchess Amalia of Weimar writes with a packet of journals published "for private circulation" during a summer holiday:—"The authors are Hätschelhans" (the name generally given to Wolfgang in the confidential letters), "Wieland, Herder, Knebel, Seckendorff, and Einsiedel. Frau Räthin's world-renowned connoisseurship will easily enable her to identify the author of each piece." And Wieland (who, like Merck and all who had been admitted within the charmed circle of intimacy at *Casa Santa*, addresses Frau Aja as an adopted son), besides asking her opinion on his own works, entrusts her with a delicate editorial commission. Klinger, one of the *Sturm und Drang* brotherhood (of whom Wieland asks, "Is it better with the youth, or does he still swill lion's blood?"), offers to send a tragical tale for insertion in the *Mercur*, of which Wieland is editor, who, anxious not to incur the odium of rejecting the work, begs his correspondent to look at it first and tell him if it is good for nothing, that he may make an excuse to the author if so. Besides all tributes from without, and besides the fact that a sufficiently comprehensive culture is required in order to appreciate *all* Goethe's writings, as we cannot doubt his mother did; her own letters, heedlessly composed and spelt pretty much as Providence pleased, would of themselves go a long way to explain the dictum of Duke George of Mecklenburg: "It has never surprised me that such a woman should give birth to a Goethe."

The letters are generally short, homely in style and language, and absolutely free from literary pretensions:—"What does the woman want with me?" she exclaims, when Madame de Staël is in Frankfort; "I have never written an A-B-C-book in my life, and my good genius will preserve me from doing so in future." And yet Goethe himself could not be more sublimely superior to the chatter of the clever Frenchwoman: "I felt as if I had a millstone round my neck." "It was all very nice so long as they would let me stay away." Even her denunciations of wit are amusing: "Wit, wit! it always reminds me of a *; it's cooling, but it gives one a stiff neck." Is this Frau Aja or George Eliot? Unfortunately none of Frau Goethe's letters to Wieland seem to have been preserved, but one is not inclined to quarrel with the editor for having nevertheless printed as many of the answers as he could procure; they are amusing in themselves, and they help to complete our*

idea of the person addressed. Some letters from and to the Grand-duchess Amalia are new, and they help to establish still more firmly the strange and edifying truth, that all through the relations between the grand-ducal family and the house of Goethe, the former never ceased to feel themselves the party obliged and benefited. Of course it is lucky for the ghost of Karl August that this was so; posterity would have torn him limb from limb if he had failed in any one particular of the respect due to the genius that deigned to harbour at his court; but the fame of a Maecenas is always so modest that one has to be careful not to underrate the merits of the duke. M. Mézières expatiates very judiciously on all that his character gained under the influence of intercourse with his illustrious mentor; but the fact remains that he chose Goethe for his friend in defiance of all Weimar when a boy of eighteen, a conclusive proof that it was not from Goethe he acquired the gift for which Goethe praised him fifty years later, "of discerning men's talents and characters, and assigning his right place to each." One or two of his letters to Frau Rath are printed in this volume, downright and rugged in tone, but thoroughly affectionate. Two very interesting letters from Goethe himself refer to their visit to Frankfort, just before the *genius-journey* to Switzerland in 1779. He gives his mother the minutest instructions for her domestic preparations; the attendants and servants are to have mattress-beds, but for the duke and Goethe only a *Strohsack* each; no lustres in the duke's room, he would laugh at them; four courses, neither more nor less, for dinner; and so on. The letters of Frau Rath to her grandchildren, to Friedrich von Stein, the boy whom Goethe almost adopted, and to her friend Unzelmann the actor, have been already published in different places, but there are four rhyming epistles to Fräulein von Göchhausen, for the sake of which all the editor's sins of omission and commission may be forgiven him. The writer declares:—

"Aber als mich meine Mutter gebar,
Kein Poetengestirn am Himmel war;"

but all the pieces show a remarkable facility of composition, and on p. 231 there are some lines—if we had space to quote them—that have a maternal likeness to some of Mephistopheles' tirades.

If the collection of Frau Goethe's letters had been complete, we should have earnestly recommended the work to the consideration of translators, though it must be admitted that the language of the free-spoken Frankfort dame might present some difficulties; the English, for instance, for *Potz-fickerment* has still to be invented. H. LAWRENNY.

Dante's Divine Comedy. [Dante's *Göttliche Komödie nach Inhalt und Gedankengang übersichtlich dargestellt*. Mit biographischer Einleitung. Von Dr. Rudolf Pfleiderer.] Stuttgart: 1871.

THE object of this book, like that of Miss Rossetti's *Shadow of Dante*, reviewed in the *Academy* of December 15, 1871 (vol. ii. p. 551), is to give educated persons a more accurate knowledge of the *Divine Comedy*, and thus to extend its popularity, and increase the number of its readers. The difference between the two mainly arises from their being intended for different classes of persons, Miss Rossetti's being rather suited to beginners, while that of Dr. Pfleiderer presupposes a knowledge of, and interest in, many of the questions which arise from a study of the poem, and aims at establishing certain views of his own. Thus, while the method of both is nearly the same—to give a brief life of the poet, general prefatory remarks to the whole poem, and an analysis of its three sections, with special introductions to each—the English volume is the more readily intelligible,

owing to its simplicity and the useful diagrams that accompany it, and the German, on the other hand, is far fuller and more exhaustive. Both introduce numerous quotations from the poem itself, for which purpose, as Miss Rossetti has made use of the translations of Mr. W. M. Rossetti and Mr. Longfellow, so Dr. Pfleiderer has availed himself of that of Streckfuss, and in one or two passages of those of Schlegel and Philalethes (the king of Saxony). The first of these, which is in rhyme, is admirably suited for the purpose from its spirit and vigour; and its weak point, that it is in imperfect *terza rima*, is less noticed in isolated passages: a complete reproduction of the rhyme of the original has not yet been accomplished in German, as it has in English by Mr. Cayley and Mr. Ford, though we are glad to see that such a translation, from the pen of Herr Notter, is in course of publication.

In his sketch of Dante's life, the writer has excellently pointed out what distinguishes Dante from all other great poets: the combination in his person of the character of idealist and artist with that of practical man of the world. Had he not been the sweet singer of the *Vita Nuova*, absorbed in his romantic love for Beatrice Portinari, and at the same time the Florentine patriot, deeply involved in all the struggles of his country, the *Divine Comedy* could never have been produced, or, at least, would have wanted that universality and that union of the real and the ideal in which its greatness largely consists. And, in like manner, his relation to his age is a twofold one, which only a man of the highest genius could occupy; that age itself wearing a two-fold aspect, checkered with strange contrasts of light and darkness, marked by examples of extraordinary piety and extravagant crime, and, in the midst of profound ignorance and wild confusion, producing vigorous growths in art and literature, and developing the germs of political organization. In the midst of these discordant elements we see the figure of Dante, "facing, like a Janus, at once backwards and forwards." The representative of his time, in all its beliefs and conceptions of things, he is at the same time the prophet of the coming age. He is a sincere and orthodox Catholic, but, not the less, half a reformer. His political views are both limited by and pass far beyond the circumstances which surround him. Like the seers of the Old Testament, he finds in the present the means of embodying and representing laws of permanent application.

Towards the end of the volume, Dr. Pfleiderer has given an excellent *résumé* of the various views that have been taken of the purpose and meaning of Dante's great poem—a survey from which we may learn how immense has been its influence on the intellectual life of succeeding generations. With the earlier interpreters the moral and theological aspect is almost exclusively predominant, even to the ignoring of the literal meaning. In later times another one-sided mode of interpretation has also sprung up in Italy, and for the most part found its home there, according to which the political side of the poem assumes overwhelming importance. It is in Germany, during the last half-century, that a less exclusive and more qualified view has arisen, admitting at once three elements, the personal, the moral, and the political; though here again two schools are to be found, according as the greater prominence among these is assigned to the moral and religious significance—on which side are to be found the great names of Witte and Philalethes—or to the political, which is ably represented by Wegele. Our author claims to be himself the first to place the three in a co-ordinate position, and to put clearly forth the unity of purpose in the poem, by finding a common point in which the three may be combined. This is the person of Dante; so that the poem is to be regarded as the mirror of his

experience in life and thought ; and its outline, in particular, represents the history of his sin, his conversion, and the mode of his renewal. But beyond this he sees in himself human nature personified, and finds in his own struggles the representation of their struggles, and in his own progress towards salvation the way which they also have to follow ; thus excluding the didactic tendency, which is essentially unpoetical. In the first instance, it is the men of his time of whom he stands forth as the embodiment ; and thus the politico-historical side of the poem is introduced, explaining the means of their temporal renovation ; afterwards, in a still wider application, it is mankind at large, whose eternal restitution is to be brought about in the same way as his own was ; and the consideration of this involves in its universal aspect the moral and theological significance of the story. Therefore it is that he relates his vision for the instruction of men, in accordance with the injunction laid upon him by his forefather Cacciaguida in the *Paradiso* (canto xvii.)—

"Rimossa ognì menzogna,
Tutta tua vision fa manifesta,
E lascia pur grattar dov' è la rogna ;
Che, se la voce tua sarà molesta
Nel primo gusto, vital nutrimento
Lascerà poi quando sarà digesta."

In this way the poem in every sense deserves the appellation of "The Soul's Epic." At the same time, in the course of its development, we must expect to find that now one, now another, of these meanings will take the most prominent position, and not unfrequently one will overlie the other : it is from the latter of these results that the manifold application of certain passages arises.

This view of the *Divine Comedy*, Dr. Pfleiderer proceeds to apply to that most difficult subject, the allegory which it embodies. In this likewise he finds a corresponding three-fold character. Thus, in interpreting the *Selva*, he applies it, first, to Dante's own youthful errors ; next, to the sinfulness of mankind ; finally, to the confusion of his own time, arising from political aberrations and false relations of Church and State. Similarly, when he defines the position of Dante's two guides, Virgil and Beatrice, these characters are made to represent respectively—first, his favourite poet and master in the poetic art, and his first love, the thought of whom had led him to heavenly things : secondly, reason and revelation—Virgil being described as saying of his own function (*Purg.* xviii.), "quanto ragion qui vede, derti poss' io ;" while some things which are attributed to Beatrice, especially the circumstances of her appearance in the Terrestrial Paradise, are not less than blasphemous, if she is to be regarded as a mere woman, however glorified : thirdly, the temporal institutions necessary to human welfare, and especially the Empire—Virgil, as the author of the *Aeneid*, being the poet of the origin of the Roman empire, and consequently being constantly represented in the *Inferno* as laying special stress on offences against the state ; and, the primary means of man's eternal welfare, divine grace, quickening the soul. Now in estimating this and every other view of the allegory in Dante, we ought always to bear in mind two things—on the one hand, that from the character of the poet's mind, and from what we find in his prose writings, we have reason to expect every kind of refinement of meaning in his poem ; to which it should be added that in his epistle dedicatory to the *Paradiso*, addressed to Can Grande della Scala, he expressly attributes to the poem a moral and allegorical meaning : on the other hand, that it is easy to find a recondite meaning where there is none, and to engrave theories of our own on Dante's writings. In the present case, making all allowance for the former of these, we cannot help feeling that Dr. Pfleiderer, notwithstanding the completeness of his scheme, has erred too much on the side of ingenuity in assigning to Virgil a political

character ; in fact, in one place (p. 179) he seems somewhat to be sensible of the difficulty of it, because he is forced to include under the temporal institutions of which Virgil is the representative, the outward and visible functions of the Church, which he has not mentioned elsewhere. Still, we think that in this portion of his work, as well as elsewhere, Dr. Pfleiderer has done good service to the study of Dante ; and we regret that he has not given us his views on the intricate allegory of the exceedingly difficult 32nd canto of the *Purgatorio*, which, strange to say, has been passed over entirely unnoticed.

H. F. TOZER.

Varnhagen von Ense's Biographische Portraits. Leipzig : Brockhaus.

LUDMILLA ASSING, opening once more the inexhaustible Pandora box in which her late uncle's manuscripts are contained, has presented us with a new series of biographical essays written by Herr Varnhagen at different periods of his life. For students of a certain phase of North German literature and society, the representatives of which were attracted by Rahel's sentimental *esprit* and her husband's birth and position, the opinions and troubles of Thoreff, the great physician or quack as the reader may take it, and of Caroline von Fouqué, the wife of the author of *Undine*, and herself a popular novelist, may be of some importance. The only portrait of general interest, however, which the volume contains is that of Clemens Brentano, one of the leaders, and, as far as mere poetical power is concerned, decidedly the most gifted representative of the romantic movement in Germany. The material afforded in the sketch of his professorial character, and several of his letters addressed to Rahel, is the more valuable, as our sources for the knowledge of his character and literary career have hitherto been so extremely scanty. Besides the contrast between the characters of the diplomatic man of the world and the eccentric poet, as it became soon but too evident when they met at Töplitz in 1811, and which is still recognisable in every line of Varnhagen's account, is highly amusing and equally characteristic of both parties concerned. Varnhagen, in his capacity as literary amateur, had seen enough of the "Sturm and Drang" of contemporary poets not to be shocked by a moderate amount of extravagance and quaintness of manner. Still the childish braggadocio and sometimes heartless vein of freak and foul-mouthed gossip, which in Brentano subsist together with the most high-minded enthusiasm for the beautiful, were quite a puzzle to the experienced diplomatist. After relating a particularly unpleasant trick played him by the poet, our author adds in despair : "I observed this sudden transmutation with amazement, and began to see what an unsafe customer I had to deal with." This same whimsicality, systematized and thoroughly affected as it was in most cases, contained at the same time the fatal germ of destruction for the noblest aspirations of Brentano's life and works. Occasionally it intruded even into the sanctissimum of his catholic mysticism, the sincerity of which it displays in a rather dubious light. Varnhagen relates the following amusing anecdote :—Brentano's sister Bettina discovered in a picture of St. Peter, which he pretended was drawn by himself exactly after the vision of the well-known stigmatized "Nun of Dutmar," an old tobacco-pouch, which was connected with various jokes of former times, and which now served as a wallet to the saint. When he found himself discovered, the poet heartily joined in the merriment of his sister. This fickleness of character, although not impairing our admiration for his genius, must have made personal intercourse with the poet a matter of extreme difficulty. Once Varnhagen was obliged to resort to personal chastisement, which had at once the desired

effect; the poet replying to this severe treatment with great meekness: "You will be my best friend, like Görres, who has also boxed my ears." The letters to Rahel form a sort of commentary to Varnhagen's sketch, and are quite in the character of their writer, a mixture of sensual religious mysticism and childish silliness, interrupted by passages full of deep poetical beauty, and a kind of melancholy humour to be met with only in the works of German romantic poets, and which might be expected from the creator of Ponce de Leon and the "schöne Anerl."

F. HÜFFER.

NOTES ON LITERATURE AND ART.

The controversy respecting the Polish or German extraction of Copernicus seems to be very nearly decided, in an anonymous and temperate pamphlet on the former side of the question, reviewed in the *Allgemeine Zeitung* for April 5. As the name of a village in Upper Silesia in the thirteenth century, and as a family name at the present day, Copernik, sometimes spelt Kopernik, Kopernak, Kopiernicki, is not infrequently met with, and referred etymologically to the Slavonic Kopr, Koper, *ane-thum graveolens* with the common termination *ik*. It was always known that the astronomer's father resided at Cracow before moving to Thorn, and the evidence, all presumptive, in favour of his having been a German immigrant counts for very little against the un-Teutonic sound of his name. His wife, Barbara Watzelrode, it is admitted, was of German parentage, and the only point still undecided is whether Barbara's mother was of the same stock as her husband, since otherwise a trifling advantage would rest with the Polish patriots.

J. Frohschammer writes to the *Allgemeine Zeitung* (April 8) on "Philosophy and Darwinism," objecting to the latter its want of a sound speculative foundation and its compatibility with the common theory of creation, and hinting at the superiority of the abstruser German philosophy with its promise of a transcendental Pantheism.

The German papers have been commenting on the supposed inaccuracy of a statement relating to the manuscript of Humboldt's *Kosmos* which appeared in a French publication; such a MS. had been presented by Professor Buschmann to the King of Prussia for the Royal Library at Berlin, with a very dutiful letter; and it was not generally known that the second MS., a fair copy, with the last corrections of the great author, had also been presented by the same person to Napoleon III. (with a still more dutiful letter, explaining that Humboldt's "heart was ever French"), and accordingly is still to be found at the National Library of Paris. Humboldt wrote in the Italian hand, and with lines that slanted so much from left to right that, to keep them straight, as he grew older, he gradually shortened them almost to a single word, so that each page of the white quarto paper on which he wrote was divided into a number of slender columns.

In an article by W. Lang in a recent number of *Im Neuen Reich*, on "Danteliteratur in Deutschland," it is remarked that notwithstanding the numerous contributions to the subject, and especially the translations of the poem which are constantly appearing in Germany, the *Divine Comedy* is not, nor is likely to be, a popular book in that country. Dante holds a very different position in respect of German culture from Homer and Shakespeare. This, the writer remarks, is not wonderful, because of the antiquarian research required to understand the poem, and the need of the reader's throwing himself into a point of view essentially different from his own. It is also suggested that the multiplicity of ideas and interests which Virgil and Beatrice represent detracts from their reality, and causes us to follow their guidance with less confidence. The fact that modern Italians have found no difficulty in making Dante their great political poet, notwithstanding the apparently anti-national tendency of his views, is explained by pointing out that the circumstance of the princes, who would preside over the empire in Dante's scheme, being German is a mere accident to him; he only regards them as Roman; and though they have their

relation and their duties to the whole world, yet the care of Italy is their especial function.

M. Didier has just brought together in one volume the articles on Prudhon which M. Charles Clément has contributed at different times to the *Gazette des Beaux-Arts*. The work has been fully completed by the author, and is accompanied by thirty fine engravings, reproducing the painter's most capital works, several rare etchings by him, and some of his principal drawings. M. Charles Clément is continuing his study of modern French painters; and the *Gazette* will publish in its next number the commencement of an important work on Léopold Robert. M. Clément was the intimate friend of the late Aurèle Robert, and has had the opportunity of acquiring from him much private and valuable information concerning the life of his brother Léopold.

The portrait of M. Thiers, on which Mlle. Jacquemart has been for some months past engaged, will be exhibited at the coming Salon.

M. Émile Vernier was entrusted by M. Corot, some time back, with the task of reproducing several of his paintings, in a set of lithographs published by M. Marion, the director of the *Librairie artistique*. These are now exhausted, and M. Vernier has just completed a second and more important series, in which will figure "Le Matin," "Le Soir," "Sodome," "Le Marais," "Le Berger," "La Toilette." The new issue will thus represent the genius of Corot in each of its various forms.

The Archaeological Congress of France will be held this year at Vendôme, and will commence June 18. A statue of Ronsard will be inaugurated during the sitting of the congress. A retrospective exhibition of the art-work of the Vendômois is in course of organization, and will be opened at the same time.

The Italian papers announce an open competition for a statue in white marble representing Joseph Mazzini in proportions somewhat larger than life. This statue is intended to replace the bust which was deposited at the Capitol on the 17th March, 1872. The competition will close on the 18th June this year. Designs are to be sent to 81, Via della Croce, Roma.

Three terracottas, once in the Praun'sche collection at Nürnberg, and now the property of Professor Hähnel, of Dresden, have been offered for purchase to the British Museum. They are said to be from the hand of Michelangelo. The sum asked is 3000*l.* The subjects are Morning, Day, and Night. It is not possible to speak positively as to their merits or authenticity from a brief inspection of the photographs which have been forwarded to England. If they are really the first thoughts for the figures of the Medici tomb, they should undoubtedly be secured.

Im Neuen Reich (No. 14) contains four hitherto unpublished letters of Niebuhr's, written from Rome, 1816-19, to the Minister v. Altenstein. They are valuable, as showing the impression made on him by the movement then inaugurated by the young German artists in Rome. The paintings of Cornelius, Philip Veit, Overbeck, and Wilhelm Schadow, in the Casa Bartholdy, excite his eager hopes, and he earnestly urges their claims to encouragement and aid from the government. He succeeded in obtaining some small sums for them, and even helped them himself as far as his means allowed. He urged the appointment of Cornelius in 1817, as the fitting person to start afresh the Düsseldorf Academy of Art, and eventually obtained for him (1819) an invitation to Berlin with the commission to decorate the theatre in fresco. But the letter reached Rome a month too late; Cornelius had already departed for Munich, and had there engaged to carry out the works of the Glyptothek. The letter from Cornelius to Reimer, appended at the end, contains nothing specially worth notice.

The well-known art-student and collector Baron R. v. Retberg, of Munich, has recently brought out a catalogue of Dürer's etchings and engravings chronologically arranged. This book,

which is the result of many years' labour, is a most valuable contribution to Dürer literature. It offers not only a completely new arrangement of the known materials (Bartsch and Heller are arranged according to technic or subject), but in every instance where written date fails us, carefully stated critical proof is given. The catalogue is prefaced by a sketch of the life of the master, in the form of a convenient summarised table. It had been intended to bring out the volume in time for the Dürer exhibition, which was projected at Nürnberg in 1871, but the war delayed its publication, and also deprived the exhibition of much of its contemplated importance. The *Germanische Museum* is at this moment busied in the endeavour to bring together a collection of all Dürer's known works, either in originals or in accurate copies.

A third edition of Karl Heideloff's *Die Ornamentik des Mittelalters* has just been brought out with a critical, revised text by Professor Bergau.

The number of sales which are taking place in every direction, and which are too important to be left without comment, is almost unprecedented. At the end of March the sale of the Gsell collection at Vienna realised about 2,500,000 frs. French pictures came well to the front. The "Troubadour" of Couture went for 46,000 frs., little bits by Diaz fetching 4000 and 6000 frs. a piece. It is said that a well-known London dealer bought up a lot of canvasses of "all sorts," and the Viennese are delighting themselves with the thought of the number of copies the English are going to swallow.—M. Riocreux's collection of porcelain and faience, which was sold by auction on March 30, also merits notice. One of the principal pieces was a dish signed on the reverse, "1530, M. G. da Gubbio." The subject in the centre was "Romulus and Remus suckled by the Wolf." The colouring is polychrome with metallic ruby reflections. This went for 700 frs.; an Urbino bowl from the Pasolini collection for 112 frs. The specimens of Nevers and Rouen pottery went comparatively low. For example, a "Flambeau appliquéd" (an arm issuing from the mouth of a mask), which was an extremely rare example of Nevers, obtained but 36 frs.—A large portion of the work of Androuet Ducerceau came to the hammer in the second week of April, at the Hôtel Drouot, amongst the effects of the late M. Vaudoyer, the well-known architect. This excessively rare collection was secured for the Berlin Museum, in spite of the zeal of a French amateur, who ran the biddings up to about 5000 frs.—The apparently low prices given at the Persigny sale are now explained by the fact that many of the attributions were incorrect, and a considerable portion of the paintings were either damaged or repainted. The consequence was that a few good things went for less than their real value, so disastrous was the impression produced on amateurs by the close neighbourhood of more than doubtful work. Amongst others may be cited "The Fool," attributed to Velasquez, but probably by the hand of some follower or pupil. This picture, really remarkable in itself, fetched but 750 frs., and was certainly worth more. It became the property, together with the Reynolds ("Prince of Wales"), of M. Maurice Cottier.—The Regnault sale, paintings (19), water-colours (20), drawings (83), studies, sketches, &c. (42), realised 141,031 frs. The principal sums were: for a "Panneau décoratif," 25,000 frs.; "Sortie du Pacha à Tanger," bought by M. Haro, 10,000 frs.; a water-colour drawing, "Cour mauresque avec laurier-rose," 6300 frs.—The two first days of the Gillott sale at Christie and Manson's produced 73,236/. Some of the highest prices were as follows: "Hampstead Heath," by Linnell, 1600 guineas; the "Woodlands," Linnell, 2500 guineas; "Roast Pig," by Webster, 3500 guineas; "The Wooden Walls of Old England," Stanfield, 2700 guineas; "The Bay of Naples," by W. Müller, 2000 guineas; "The Chess-players," W. Müller, 3950 guineas. This picture, which is perhaps the artist's *chef-d'œuvre*, excited a keen competition between Mr. Addington and Mr. Agnew, who eventually carried it off. Turner's "Going to the Ball" and "Coming from the Ball, San Martino, Naples," fetched respectively 1700 and 1500 guineas. These pictures are in his later manner. "Checkmate Next Move," by Mr. Horsley, was knocked down to Mr. Cox for 1600 guineas. That portion of Mr. Gillott's collection which represents the early English school came to the hammer on the 26th and 27th April; and the third part, including the old masters and watercolours, will be sold on the 3rd and 4th May.

A remarkably fine specimen of Fortuny's work is now on view at M'Lean's gallery in the Haymarket. The subject is the interior of a Moorish court of vast size. Two culprits lie already in the stocks, while a third is struggling hopelessly with the executioner, and from an inner recess a solemn assemblage look down on the proceedings. The foreshortening is very fine; and in spite of the small size of the figures, the character of Eastern attitude is given with that simple truth which is most unapproachable. A ray of light, clear as day, streams across the picture; and every shadow is full of the most subtle pulsations of colour, the key-note of which is given in the blue-green edge of a motionless pool of water which sleeps, full of glassy reflections, to the left in front. There is no touch of poetry or sentiment, but an air of brilliant and absolute certainty characterizes the whole with a daring charm.

New Publications.

- HUGO, Victor. *L'Année terrible*. Paris: Michel Lévy.
 KINKEL, G. *Euripides u. die bildende Kunst*. Berlin: Ebeling u. Phahn.
 LANETTI, V. *Degli studi, delle opere e della vita del pittore Sebastiano Santi*. Lettura. Venezia: Longo.
 PFIZMAIER, A. *Kunstfertigkeiten und Künste der alten Chinesen*. Wien: Gerold's Sohn.
 WESTPHAL, R. *Geschichte der alten u. mittelalterlichen Musik*. I. u. 3. Abth. (Plutarch üb. Musik.) Leipzig: Leuckart.
 WILLE, Eliza. *Johannes Olaf*. 3 Bde. Leipzig: Brockhaus.

Theology.

The Book of Job. [*Das Gedicht von Hiob*. Hebräischer Text, kritisch bearbeitet u. übersetzt, nebst sachlicher u. kritischer Einleitung, von Adalbert Merx.] Jena: 1871.

THIS volume, as its title indicates, is not a commentary. The author, who has already distinguished himself in other departments of Semitic study, does not appear ambitious to add to his already well-earned reputation, that of a Biblical commentator; though, if there is one book of Scripture which more than another stands in need of detailed treatment, it is the Book of Job. Dr. Merx, however, has undertaken a task which is even more difficult and important than a commentary. He has endeavoured, with the aid of the ancient versions, and in particular of the LXX, to present the original text of Job in a revised and amended form, and certainly no more acceptable service could be rendered to the student of the Hebrew Scriptures than a successful attempt to do so.

The revised text, which, with a translation, forms the principal part of the volume, is preceded by an introduction, in which the author discusses, with distinctness and brevity, the usual questions as to the subject-matter, form of composition, age, &c. of the poem, on which so many conflicting opinions have been expressed. It must suffice to remark here that he considers the Book of Job to be an ideal history, in which the chief personage (*Ijjob* = "the antagonist") is the embodiment of the writer's doubts and antagonism to the received faith, while his three friends are the representatives of that faith, and of the writer's efforts to cling to it and overmaster his sceptical thoughts. A sublime and overpowering revelation of Jehovah brings the conflict to a close. With regard to the revision of the text, the author endeavours (1) to show its necessity, and (2) to point out the principles on which it should proceed. He by no means withdraws from the Jewish doctors the due meed of applause for the singular care with which the sacred text has been handed down through so many generations; but at the same time he most justly observes that, besides the question whether the Jewish doctors have faithfully transmitted the text anciently received by them, there is

another of still greater moment, viz.: What was the state of the text when they received it? It is not sufficiently considered that the extraordinary precautions which they adopted for the purpose of preserving the text unchanged must have had the effect of perpetuating old errors, as well as preventing the intrusion of new ones. Unquestionably all the books must have suffered, some to a greater, some to a less extent, between the time of their original composition and the age when their transmission began to be an object of anxious care to the Jews. This is evident not only from a comparison of the traditional text with the most ancient versions, but also from a comparison of various parts of that text with one another, as, for example, the corresponding sections of Chronicles with the text of Samuel and Kings. When, therefore, in our study of the Hebrew Scriptures, we stumble, as we not unfrequently do, on passages from which it is impossible to extract any suitable or even intelligible meaning without having recourse to the most arbitrary treatment, we ought not to keep out of view the possibility of our embarrassment being occasioned by a corruption of the original text, though, indeed, there are scholars who seem prepared to take all sorts of liberties with the grammar and lexicography of the language, rather than sanction the slightest deviation from the Masoretic tradition. Dr. Merx gives examples from Job and elsewhere of textual errors arising from the interchange, the repetition, and the omission of letters. Under the last head he adduces Job xxvii. 18, "He buildeth his house as a moth," בְּגַדִּים, for which he would read, on the authority of the Greek and Syriac, גַּדְיָה, as a spider (comp. viii. 14); and he accounts for the change to the present text by supposing the existence of a blemish in the original MS., thus—בְּגַדִּים.

The principles of revision on which Dr. Merx proceeds are in theory extremely simple. First of all, by comparison of extant MSS. he would endeavour to reach as close an approximation as possible to the text of the archetypal MS., from which they have all been derived. The text thus obtained he would set down as one codex. Then, from the ancient versions, chiefly the LXX and Peshito, he would do his best, by the careful study of their language and spirit, to reproduce, in the case of each disputed or difficult passage, the consonantal texts which lay before their translators. To these texts, also, he would assign the rank of ancient codices. And by comparison of the codices thus obtained from the versions with that obtained from the MSS. he would restore the true text. To purely conjectural readings he would have recourse only in extreme cases, when all other means of emendation have failed. With regard to the relative importance of the codices just mentioned, he assigns the first place to that derived from the LXX, as being, in his opinion, more ancient than the others. To the old Syriac version he assigns a middle place, both chronologically and with respect to the character of its readings, between the LXX and Masoretic texts; and for its use in textual emendation he lays down the following rules:—(1) The reading, in which the LXX and Syriac concur, is the more ancient. (2) The LXX is to have the preference, but not very decidedly, even though the Masoretic reading is confirmed by the Syriac. (3) If the Masoretic and LXX concur against the Syriac, the latter is at once to be rejected, unless the internal evidence in its favour is very decisive. The Vulgate and Targum, being both founded on the traditional text, are naturally of inferior value as aids in its reconstruction, except in those cases in which they depart from it and agree with the LXX and Syriac.

It will thus be seen that the main principle on which the author proceeds in his revision of the text of Job is that the LXX represents an older and better text than the Maso-

retic. We believe very few indeed will be found to concur with him in this opinion. In fact, he does not himself venture to carry out the principle to its legitimate results; for it is usually to the emendation of the text only in vexed passages, and not always even in these, that he applies it. Everywhere else he adheres to the traditional Hebrew text against the LXX. But if the LXX text be older and more reliable than the Masoretic in obscure passages, must it not also be so in passages which are not obscure, but in which nevertheless it deviates from the Hebrew? One would imagine it must be so. And, therefore, if the Masoretic text is accepted as a general basis for the revised text (and the author does so accept it, usually following it even where it differs from the LXX), consistency requires that it should have the preference throughout, except in those cases in which it can be shown that the readings suggested by the LXX are superior, not as LXX readings merely, but on other grounds.

Independently, therefore, of the practical difficulties which must be encountered in making the attempt to revise the text of Job on the author's principles, and of which no one is better aware than the author himself, we must express our conviction that the principles themselves are erroneous, and that the adoption and application of them cannot be expected to lead to a satisfactory result. This conviction, we must add, has been quite confirmed by an examination in detail of the author's revised text, which we can by no means accept as a nearer approach to the original form of the text than that of our Hebrew Bibles. We fear that the chief blemishes in the present text date from a period anterior to the age of the earliest version, and cannot now be amended otherwise than by critical conjecture. At the same time we heartily commend the spirit in which the author has undertaken so difficult a task, and the praiseworthy modesty with which he speaks of the result of his labours.

Our space does not permit us to examine Dr. Merx's views of the so-called strophical arrangement of the poem, which also bear (somewhat unfortunately, we think) upon his reconstruction of the text.

D. H. WEIR.

Intelligence.

Mr. Sanday, of Trinity College, Oxford, well known to our readers by his articles on Keim's *History*, has published the first-fruits of his researches into *The Authorship and Historical Character of the Fourth Gospel*. Those who are best prepared to agree with his conclusions will appreciate the fairness and simplicity with which they are defended. The work is, in fact, remarkable for more reasons than one. First, on account of the thoroughness with which the author has examined the most recent works on the subject, whether English or German, conservative or liberal in tendency. We almost fear that he has carried his laudable desire to be abreast with the latest investigations to an extreme, and that he has injured the effect of his book by too exclusive a consideration of Keim and Sir R. Hanson. Secondly, because of his frank acceptance of the fact that the external evidence is insufficient to decide the question at issue, and his consequent limitation of the enquiry to the evidence supplied by the Gospel itself. Chapter after chapter is analysed, and the psychological verisimilitude of the details brought into bold relief. The circumstantial precision of the narrative is thus found to be so great that "Shakespeare himself, if he had been born after the taking of Jerusalem, could not have written the fourth Gospel as it is" (p. 295). The assumptions of the work are those of a sober orthodoxy. Inspiration is a (supernatural) "heightening of natural faculties"; the miracles of the Gospels are accepted as in the gross "historical," without enquiring too closely into the quality of the evidence. It seemed desirable to address this warning to the reader, in his own interest as well as that of the author. It would be unfair to Mr. Sanday to infer from the studied moderation of the title of his work, and from his adoption—at least in part—of the method of "liberal" criticism, that he is without an opinion on the graver matters which underlie such researches as the present. And it would be unfair to his readers to allow them to suppose that he has done more than touch the outskirts of the question at issue. To be complete, the book should

contain an examination into the antecedent probability that the biographies of the founder of the Christian religion contain a legendary accretion. Mr. Sanday not only ascribes the fourth Gospel to St. John, but implicitly denies that it contains any legendary matter (p. 273). This involves a similar denial with regard to the other Gospels, which no antagonist could accept without demanding a proof. Objection may and doubtless will be offered to many of Mr. Sanday's "psychological" arguments, some of which have a strong likeness to the century, and might possibly have been modified by a more special knowledge of Old Testament criticism. We notice, however, that he accepts "the second Isaiah" (p. 40) as a distinct part of the Old Testament Scriptures. This implies some thoughtful study of the subject, though it follows naturally from the psychological point of view at which the author has placed himself. A review of the work will follow.

A valuable discovery has been made, in the episcopal archives at Coire (Grisons), of two fragments of an old Latin version of St. Luke, which had been stuck on the inside of the cover of a book. They contain Luke xi. 11-29, xiii. 16-34. In the new number of the *Studien und Kritiken*, Prof. Ranke gives the two most important columns, containing Luke xiii. 16-25 ("alligavit Satanus—foris stare dicentes"). He remarks that the text agrees most closely, especially in its omissions, with that of the Codex Vercellensis (sac. iv.). Either the MS. from which it is taken was a copy of that codex or else both MSS. were derived from one and the same source. Vercelli is only thirty (German) miles from Coire.

The Society for Biblical Archaeology has lately received a rich present for its library, in the shape of an ancient Pentateuch-roll, dating apparently from the tenth century. This MS. is the only copy of the Pentateuch as used by the Aden Jews, descendants of the pre-Mahometan inhabitants, which has yet reached this country. The council of the society hope soon to exhibit the roll to the public, with a detailed examination of its philological and archaeological peculiarities.

Contents of the Journals.

Zeitsch. f. wiss. Theologie, vol. xv. No. 3.—Justin's Relation to the Acts of the Apostles, by Fr. Overbeck. [Seeks to show that Justin, like the Acts, belongs to a stage in post-apostolic gentile Christianity when the genuine Pauline doctrine had lost much of its purity.]—Peter in Rome and John in Asia Minor, by A. Hilgenfeld. [Conservative; against Lipsius on the one hand, and Scholten on the other.]—On the Contradiction between 2 Tim. iv. 20 and Acts xxi. 29; or, On the Imprisonment of the Apostle Paul, by H. Lucht.—Luther's Birth-year again, by H. Holtzmann.—Notices of books.

Theological Review, April.—On the Development of Opinion in the Early Christian Church, as indicated by a comparison of the different books of the New Testament. Part II. By the late J. J. Tayler. [A charmingly written popular, but not at all superficial, essay.]—Theism, Atheism, and the Problem of Evil, by Moncure D. Conway.—St. Paul and the Nero-Legend, by C. J. Monro. [Nero the veiled, and Vespasian the unveiled Man of Lawlessness; Vitellius "the restraining agent."]

Journal of Philology, No. 7.—Notes on three passages of Exodus, by W. A. Wright. [1. Ex. iii. 14, "I AM, because I am." 2. Ex. xxii. 4 (5). Read נָאכְתָּנוּ, and render, "If a man shall set on fire . . . and shall put the burning fuel so that he burn up the field," &c. 3. Ex. xx. 4, 5; יִלְמֹד, not "likeness," but "shape," or "form." Render, "And as to any form . . . thou shalt not bow down to them."]

New Publications.

CREMER, H. Biblico-Theological Lexicon of New Testament Greek. Transl. by D. W. Simon and W. Urwick. Edinburgh : T. and T. Clark.

DELITZSCH, Fr. Commentar zur Genesis. 4. Auflage.

HAVET, E. Le Christianisme et ses Origines : l'Hellenisme. Paris : Levy.

KEIL, C. F. Biblischer Commentar. Jeremia-Klagelieder. Leipzig : Dörfling u. Francke.

KNOBEL, A. Der Prophet Jesaja. 4. Aufl. Bearb. v. Dr. L. Diestel. Leipzig : Hirzel.

PAUL of Tarsus. By a Graduate. Macmillan.

SANDAY, W. The Authorship and Historical Character of the Fourth Gospel. Macmillan.

SCHRADER, Eb. Die assyrisch-babyl. Keilinschriften und ihre Resultate für das A. T. Giessen : Ricker.

VAUGHAN, R. B. The Life and Labours of St. Thomas of Aquin. Vol. II. Longmans.

Physical Science.

Exotic Butterflies; being Illustrations of New Species. Parts I-30.

By W. C. Hewitson. Van Voorst.

Equatorial Lepidoptera, described by W. C. Hewitson. Van Voorst. **Lepidoptera Exotica**; or, Descriptions and Illustrations of Exotic Lepidoptera. By A. G. Butler. Parts I-II. Janson.

Cistula Entomologica. Parts I-4. By A. G. Butler. Janson.

A Synonymic Catalogue of Diurnal Lepidoptera. By W. F. Kirby. Van Voorst, 1871.

Catalog der Lepidopteren des Europäischen Faunengebiets. Von Dr. O. Staudinger und Dr. M. Wocke. Dresden : 1871.

We have here strung together several recently published works upon the beautiful insects constituting the order Lepidoptera, commonly known under the names of butterflies and moths, with the view of calling attention to the wonderful increase in our knowledge of those tribes which has been made during the last quarter of a century. Looking still further back, we remember the time when exotic Lepidoptera were almost entirely neglected by our entomologists. The great collectors of the last century, especially Drury and Francillon, had passed away, and Mr. Haworth's collection may be said to have been the sole accessible private depository of the traditions which Fabricius had left behind him. McLeay's famous collection was locked up, and it was in Mr. Haworth's cabinet that we were able to find references to the wonderful volumes (seven in number) of drawings of exotic butterflies made during the last quarter of the eighteenth century by Mr. Jones, so constantly referred to by Fabricius, from which, indeed, from time to time, Donovan professed to publish copies of rare species only to be found represented in those delineations. After the death of Samouelle, Edward Doubleday was appointed one of the entomological assistants at the British Museum, and his strong bias for Lepidoptera led to the arrangement and increase of the national collection in a very marked degree, whilst the publication of the fine work on the genera of diurnal Lepidoptera which he commenced, the plates of which were drawn by Mr. Hewitson, extended the taste for these beautiful objects far and wide, which has been further fostered by the publication by the latter of these gentlemen of a series of volumes, of which the title is given at the head of our list, containing most admirable representations of new exotic species. Hence, at the present day, the number of amateurs of exotic butterflies is so greatly increased that many collectors have been despatched to different quarters of the globe to search for specimens. The gigantic collections formed on the Amazons by Mr. Bates and in the Malayan Archipelago by Mr. Wallace have also contributed to swell the lists to a great extent; but still so endless are the productions of nature that even within the last two or three years Mr. Buckley, after less than a twelve months' visit to the eastern slopes of the northern portion of the Andes, brought home a collection of butterflies in which from 150 to 200 new species were contained, most of which have been described by Mr. Hewitson in the second work on our list. In like manner a collection of butterflies, amounting in number to about 50,000 specimens, has recently arrived from Costa Rica, formed by Dr. van Patten, containing about 50 new species, of which the descriptions have been partially published by Mr. Butler in his little periodical work, the *Cistula Entomologica*; the same author having also contributed materially to our knowledge of new exotic species by his work *Lepidoptera Exotica*, in which figures are given which, considering that they are printed in chromo-lithography, in many instances give very characteristic representations of the various objects they are intended to delineate. Many other entomologists, both at home and abroad, are engaged in the

delineation and description of new species, both British and exotic, of butterflies and moths, so that scarcely a periodical devoted to zoological subjects now appears without containing fresh materials towards our knowledge of these tribes.

The fifth work on our list has been already (although too shortly) noticed in our pages. It is a most carefully compiled catalogue of all the species of butterflies of which descriptions had been published almost to the date of its own appearance. It consequently contains the most recent summary of the diurnal portion of the order, being confined to the butterflies, of which it enumerates 7,700 species, not including many named varieties which have been considered as distinct by different authors. In the British islands we possess only 66 species of butterflies; but in Staudinger and Wocke's catalogue (the sixth work on our list) we find that the number of species of butterflies belonging to the European fauna amounts to 456, whilst the number of nocturnal Lepidoptera or moths amounts to about 2800. In this work these authors consider it to be "une erreur, conduisant même à des conséquences absolument fausses, de prendre les limites de la géographie politique pour cadre quand on veut considérer un certain ensemble en histoire naturelle." Their catalogue consequently contains species found in a great part of the north of Asia as well as the Holy Land and north of Persia, and also the mountainous regions of the north-west of Africa, and the Madeira and Canary islands; but it is in the tropical and subtropical regions, especially of the New World, that the great mass of diurnal Lepidoptera is found.

The great additions to our collections of exotic species to which we have already alluded have made us acquainted with the peculiar fact, that certain species common and quite uniform in their appearance and characters in certain given localities, are found in a slightly modified, but persistent, form in other regions, and this peculiarity has given rise to great uncertainty in the nomenclature of the species, some authors contending that these local forms are to be treated as absolutely distinct, whilst others maintain them to be only varieties of the previously known types or races. Let us take, for instance, the gigantic types of the sub-order which, from their size, have well been named *Ornithopterus* (bird-winged), and which are natives of the East; of these we find *Papilio Priamus* made up in Mr. Kirby's catalogue of not fewer than seventeen local forms, which have been named *Priamus*, Linn.; *Panthous*, Linn.; *Richmondia*, Gray; *Cassandra*, Scott; *Euphorion*, Gray; *Pronomus*, Gray; *Poseidon*, Doubleday; *Cronius*, Felder; *Boisduvalii*, Montrouz.; *Oceanus*, Felder; *Arruana*, Felder; *Urvilliana*, Guérin; *Triton*, Felder; *Pegasus*, Felder; *Archideus*, Felder; *Lydias*, Felder; and *Croesus*, Wallace. (The last-named insect is the one which is described by Mr. Wallace in his *Travels* as having so greatly excited him when he first observed it—and which was sold at 10*l.* per pair when first received in England—that it threw him into a fever for several days.) There is also in India and the adjacent districts and islands a series of very elegant butterflies, of which *Pap. Paris* is the type, distinguished by having their wings powdered with golden-green atoms; they in like manner exhibit permanent variations of no higher specific rank than those of the *Priamus* group in their respective districts, and yet we find each of them in Mr. Kirby's catalogue given as distinct species. So, again, looking at the genus *Papilio* in Staudinger and Wocke's catalogue, consisting only of seven species, we find *Papilio Xuthulus* of Bremer given as a variety of *P. Xuthus* in the text, but in the appendix we are told "bona est species, sec. Felder," whilst the Syrian *P. virgatus* of Butler is doubtfully considered as a variety of *P. Podalirius*.

This diversity of opinion, leading, as may easily be conceived, to endless disputes as to the specific names to be given to this or that presumed species or geographical variety, or sub-species or race, as it has been variously called, may at first sight appear of a trifling character, but very little reflection will show that it involves problems of very wide application, amongst which the modification of form, the evolution of species, and even the question of the unity of the human race, may be mentioned.

"Von viel grösserer Bedeutung sind die Localvarietäten oder Racen, von mir mit v. (varietas) bezeichnet. Manche derselben werden sogar als eigene Arten betrachtet, und lässt sich hierüber gar nicht streiten, da dies ganz von den mehr oder minder Darwinistischen Ansichten des Einzelnen abhängt."*

Hence it may be safely inferred that the careful investigation of the extent of variation exhibited by the individuals of these sub-species, the modes in which they differ, *inter se*, the possibility of their effecting prolific breeds when crossed together, and other such enquiries, upon the spot where the insects occur, must be made before we can arrive at a satisfactory conclusion (even if then) as to the extent and limits of each species. In the meantime it may be suggested not only that, until such result has been obtained, each clearly distinct local and permanent variety should be named, but that, wherever possible, names should be given which should indicate in some way or other the connection of the local form with the type of the species. This has, indeed, been partially attempted by using prefixes, as in the case of *Charaxes Jasius* and *Epijasius*, or identical terminations, as in *Papilio Protesilaus*, *Autosilaus*, *Agesilaus*, *Macrosilaus*, *Telesilaus*, *Penthesilaus*, &c., or by forming anagrams from the name of the type species.

And this brings us to the consideration of another difficulty which threatens, at the present day, to become a very serious stumbling block in the way of science, namely, the perpetual change in the names, not only generical (as might more reasonably be expected), but also specific, even in the case of species well defined and universally admitted as such. The binomial system of nomenclature, introduced by Linnaeus, is now adopted throughout the animal and vegetable kingdom by nearly every naturalist, and the rule recognised is that the first name given (with a satisfactory description) to a species shall thenceforth be its permanent designation. Now this at first sight seems to be a very simple rule, but its working is not so. For instance, a description of an insect may be a very good one, taken, however, from an extreme variety, and which, not agreeing with the ordinary type of the species, has misled a subsequent writer into describing the type under a different name; when, however, the previous description of an accidental variety is found, it is immediately said that it must supersede the latter. So, when a description is found in some obscure work of a species which has for half a century or more been universally known under a name published subsequently by some well known writer, we are now told that we must take up the first name, and in this manner the nomenclature of the science is perpetually shifting. As examples: the two common European swallow-tailed butterflies of Europe are known throughout the scientific world under the names of *Papilio Machaon* and *Podalirius*, but Rennie, having discovered that Retzius (as he fancied, previous to Linnaeus), had given to the former the name of *Papilio Regiae*, resuscitated the latter name, whilst even Staudinger and Wocke in their catalogue before us have given the name of *Papilio Simon* to *P. Podalirius*, Poda in 1761 having described it under the former name, before Linnaeus first gave it, as they thought,

* Staudinger, pref. p. xxii.

in 1763, the latter. This is a striking instance of this system of *resurrection*, as it has been termed, holding, as the species does in their system, the conspicuous position of the head of the whole of the Lepidoptera. Mr. Kirby, who has adopted this system of hunting out old names to a greater extent than any previous author, quotes these dates (or rather he quotes Linnaeus under the year 1764), and consequently he ought to have given *Podalirius* under the name of *Sinon*, which he has not done, and ludicrously enough Staudinger and Wocke subsequently discovered that Linnaeus in fact employed the name of *Podalirius* in the 10th edition of the *Systema Naturae* in 1758, and have, consequently, in their appendix been obliged to restore the latter name. Now the use of names is but supplementary to a knowledge of the objects designated, and although it may be true that "Nomina si perirent, perit et cognitio rerum," the laws of nomenclature have their limits as well as the laws of any other kind of property, and as undisturbed possession of an estate for a certain number of years is held to bar all previous claimants so I do not hesitate in suggesting that, where a name has been universally adopted for a species for a certain number of years (say 25), no previous name may be restored. In fact, in such case I entirely agree with the dictum quoted by Mr. Lewes, that "Communis error facit jus."

I. O. WESTWOOD.

Scientific Notes.

Physiology.

The Action of Galvanic Currents on Nerve and Muscle.—Professor L. Hermann contributes a long paper on this subject to the 6th part of *Pflüger's Archiv*, in the course of which he shows that living muscle offers very much greater resistance to an electric current passing in a direction across the fibres than to one transmitted along them, the average difference being as 7:1. In muscles which have passed into the condition of *rigor mortis*, this difference almost entirely disappears. In living muscle the specific resistance in the longitudinal direction (taking that offered by mercury as unity) is about 2,330,000, and in the transverse direction about 15,134,000. A similar difference in the amount of resistance offered to the passage of a current in these directions is noticed in the case of the nerves, the ratio here however being somewhat less, namely about 5:1. The absolute specific resistance of nerve in the longitudinal direction is 2,554,000, and in the transverse direction 12,586,000, that of mercury being taken as 1. The longitudinal resistance of the nerve is augmented by heating it to 50° C. (122° Fahr.), the transverse resistance simultaneously diminishing. At the boiling temperature, however, the longitudinal resistance rises to that possessed by the living nerve. Professor Hermann connects these differences in the resistances offered by the longitudinal and transverse section of the nerves with the different polarizability of the sheath and nucleus of the fibres, and gives numerous and elaborate mathematical formulae bearing upon the subject. He also describes a new universal commutator.

The Relation of Urine Acid to Muscular Action.—M. A. Sawicki gives the details of a series of experiments on man, which show that the quantity of the acids excreted by the kidneys depends to a far greater extent upon the quantity and quality of the food ingested than upon the amount of exercise taken (*Pflüger's Archiv*, part vi.).

The Vagus, the Sensory Nerve of the Heart.—K. Gurboki (*Pflüger's Archiv*, part vi.) shows that in the frog the vagus is the sensory nerve of the heart, by the following experiment:—The vessels of one or both lower extremities of a frog are first ligatured, and the animal is then poisoned with woorara, the thorax and pericardium are opened, and the posterior surface of the auricle irritated with a sponge dipped in acetic or, still better, in sulphuric acid. Each time that the spot in question is irritated, reflex contractions occur in the posterior extremities. If, however, the vagi have been divided, no contraction occurs, showing that these nerves constitute the paths along which the sensory impulses exciting the contractions are transmitted.

Peripheral Distribution of Non-Medullated Nerve-Fibres.—Dr. Klein, of the Brown Institution, continues the publication of his researches on this subject in the April number of the *Quarterly Journal of Microscopical Science*. He calls in question the correctness of Dr. Beale's statements regarding the "ultimate nerve-fibres," maintaining that such fibres correspond to the coarser non-medullated fibres, which are rendered visible by the mode of preparation that he, Dr. Klein, has

employed. From this coarser plexus spring a number of finer nerve-fibres, still provided at rare intervals with nuclei, forming a rather dense plexus, that in the case of the arteries resembles a perivascular sheath. From these fibres, again, still finer ones may be traced, which no longer exhibit nuclei, and enter the wall of the vessel itself.

Histology of the Nerves.—M. Ranvier, in a paper in Brown-Séquard's *Archives de Physiologie*, describes a peculiar feature in the microscopical character of the nerves, which, he says, has hitherto been entirely overlooked, or has only been very imperfectly recognised. On examining very fresh nerves, he finds that they present a series of annular constrictions placed at regular distances about a millimetre apart. As it is almost impossible to tease out perfectly fresh nerves into thin constituent fibres, he macerates them for a very short time in picricarminate of ammonia, osmotic acid, or nitrate of silver; the cylinder-axis of the nerves becomes stained with picricarminate of ammonia or nitrate of silver, whilst the white substance of Schwann remains uncoloured. When a nerve-fibre is exposed to the action of these agents, it becomes stained at each constriction, showing that the white substance of Schwann is absent at these points. With perosmic acid, on the contrary, the white substance of Schwann blackens, whilst the cylinder-axis remains for a time unchanged: a nerve-fibre macerated in this acid exhibits a clear part at each constriction, but is blackened elsewhere, giving therefore confirmatory evidence that the white substance is not present at these points. It appears, then, that the nerve is divided into a series of segments by the presence of regularly disposed constrictions, and that at these constrictions the sheath of Schwann is either absent or reduced to an extremely thin layer, the cylinder-axis coming into proximity, if not immediate contact, with the external sheath. A small mass of protoplasm or nucleus is found at some point along the length of each internode, and usually at an equal distance between two adjacent constrictions. This has led M. Ranvier to suggest that each node was originally a cell, and that the fibres are composed of nerve-cells placed end to end and attached to one another by a thin cementing layer.

The Nerves of Taste.—M. Lussana, in the journal where the foregoing observations occur, contributes a paper on the nerves of taste, in which he shows, from pathological cases, that the sense of taste in the forepart of the tongue is not derived, as has always been supposed, from the fifth nerve, since the branches of this nerve may be entirely paralysed, and yet the taste be perfectly preserved. He likewise refers to cases in which the taste was entirely lost, while the sensitiveness to tactile impressions was undiminished in all the parts supplied by the fifth nerve; on the other hand, the sense of taste in the forepart of the tongue is lost after section of the facial nerve near its origin. M. Lussana therefore considers that the gustatory nerves of this part are due to the fibres from the facial contained in the *chorda tympani* which joins the gustatory branch of the fifth nerve, and not to the fifth itself.

Transversely Striated Muscular Tissue in Acari.—J. H. L. Flögel states that he has been able to determine the presence of transversely striated muscle in a species of *Trombidium*, by placing the whole animal for an hour or two in a one per cent. solution of perosmic acid, washing it in water, and then dissecting it in a very weak solution of glycerine. The transverse striae are very wide apart; each fibre appears to be composed of a semifluid substance, which remains uncoloured in perosmic acid, and is filled with denser columns, the fibrils.

Germination of Cryptococcus.—Hallier complains, in the last part of his *Zeitschrift für Parasitenkunde*, of the unreasoning opposition that has been offered to his views on the germination of the lowest forms of fungi. His present paper is devoted to the proof of the capability of germination of cryptococcus, and he considers the following propositions to have been satisfactorily demonstrated. 1. The yeast of beer germinates whenever it is placed under favourable conditions. 2. As long as the germ-tubes and their branches grow in a moist place, rod-like germ-cells are constricted off at their extremities. 3. Beer-yeast consequently belongs to the mould fungi (*Schimmelzüchte*), of which it constitutes a one-celled form, and is in no way connected with the *Ascomycetas* of Reess, on which point Dr. Reess has fallen into an error, pardonable enough considering the difficulty of the investigation. 4. Smut (*Ustilago carbo*, Tulasne), when its germ-tube grows in spots moistened with distilled water, behaves itself exactly like the germ-tube of yeast, that is, rod-like cells are constricted off from the extremity of every fibre. 5. The parasite found in the urine of typhus patients, when placed in a nitrogenized solution of sugar and other fluids capable of undergoing fermentation, buds like cryptococcus, and increases in the same manner. 6. Moreover, cryptococcus cells germinate under favourable conditions, and their germs comport themselves like beer-yeast when placed on a moist bed. 6. The germ-cells of Haubner's skin-fungus of the horse behave like those of yeast under similar conditions, that is, in fermentable fluids they develop cryptococcus-cells, which, under favourable circumstances, germinate and constrict off elongated cells from the ends of the fibres.

On Epilepsy artificially produced.—It is well known that M. Brown-Séquard has performed experiments which prove that by sec-

tion of certain columns of the spinal cord of the guinea-pig, and of certain of its nerves, as the sciatic, zones or regions of the skin are so affected that on causing an irritation of these parts by pinching or pricking the animal is thrown into an epileptiform state. These experiments have lately been repeated and varied by M. Westphal, who finds that a slight tap on the head of guinea-pig causes an attack of epilepsy either immediately or after the lapse of a minute. The blow, it should be mentioned, must not be a severe one, or the animal will die, either with or without convulsions, from arrest of the respiratory movements, the heart continuing to beat for some minutes. After a little time an epileptogenic zone is developed on the head. The duration of the epilepsy thus produced is from six weeks to six months. The two young ones of a female thus rendered epileptic also presented a zone the excitation of which was followed by epileptic attacks. If the skin of the head is divided, and the exposed bone percussed, an immediate attack is the result; the attacks therefore are not occasioned by any irritation or excitation of the integuments. M. Westphal attaches much importance, in a pathogenic point of view, to the little haemorrhages that occur in the white substance of the *medulla oblongata* and of the spinal cord, especially to the latter, because, according to Brown-Séquard, lesions of the cervical portion of the spinal cord are always followed by epilepsy in the guinea-pig, while lesions of the *medulla oblongata* do not produce this disease in such animals as survive the injury. At the conclusion of his work, M. Westphal mentions two cases of non-traumatic epilepsy in men in whom an epileptiform zone was formed. (Brown-Séquard's *Archives de Physiologie*, March 1872.)

Geology.

The Geology of East Greenland between 73° and 76° Northern Latitude.—The valuable collections of rocks and fossils brought home by the German Polar Expedition of 1870 have been examined by F. Toula and Dr. Lenz, of Vienna, who have just published their report (*Verh. der geol. Reichsanstalt*, No. 4, 1872, p. 71). It appears that that portion of the continent of Greenland lying between 73° and 76° 30' is formed of crystalline rocks; the islands along the coast consist in part only of the primary rocks, being covered in places with others of the Mesozoic or Cainozoic period. Some of these islands, like Shannon, are in part only of volcanic origin; the majority, however, Pendulum and Sabine islands, for instance, are chiefly composed of dolerites, anamesites, and basalt-tufas. The basalt stretches from N.E. to S.W., begins at Shannon, and, crossing Pendulum and Sabine islands, forms the important peninsula between False Bay and Tyrol Fjord, traverses Jackson Island, and proceeds thence to the east coast of Greenland. The basalt covers vast areas, but real eruption cones are nowhere observed. The anamesite exhibits the characteristic columnar structure. Miocene beds are met with in several districts; between the southernmost point of Hochstetter promontory and Cape Seebach it forms a low hilly country, at the base of a ridge of crystalline rocks, and consists of a yellow sandstone with casts of a *Cytherea*-like bivalve; on the south-eastern side of Sabine Island it occurs as quartzose sandstone with *Taxodium distichum miocaeum*, *Populus arctica*, and *Dysoxylon brachysepala*. These beds evidently belong to the same horizon as the Miocene strata of Western Greenland, Iceland, and Spitzbergen. The Miocene beds between Cape Albrecht and Cape Borlace Warren contain lignite. Mesozoic rocks are met with on the eastern and southern shores of Kuhn Island; the Jurassic deposits of this locality are composed partly of marls and sandstones, and greatly resemble those in Russia. The coarse sandstones and breccias of the southern shores of the island, which contain coal, belong to the middle Dogger (inferior oolite). The Jura of Kuhn Island rests on the crystalline rocks of a lofty mountain-ridge, which, capped with ice and snow, separates the two groups of Jurassic beds. The marl of the eastern portion of Kuhn Island is partly formed of the *Ancella concentrica*, Fisch., which characterizes the Russian Jura, as well as casts of *Cyprina*, three species of belemnites, and two of ammonites, all of which have allied forms in the Russian Jura. The Dogger beds (lower oolite) containing coal, on the south coast of Kuhn Island, perhaps belong to the same horizon as the coal-bearing Jura of Brora and of the islands of Mull and Skye; *Goniomyia Vscripta*, Sow. sp., a *Myacites modiola*, *Avicula Munsteri*, Gdf. sp., were obtained from this deposit. The occurrence of Rhaetic beds on the south coast of False Bay is of very great interest; they were identified by *Rhynchonella fisticostata*, Suess, and other characteristic fossils. Palaeozoic rocks are in all probability represented by a series of red, brown, bluish, and greenish calcareous shales and veined limestones on the north side of the Kaiser Francis Josef Fjord. Among the more prominent of the crystalline rocks are various kinds of gneiss, at several places showing stratification. Another deposit worthy of notice is a dolomite with traces of graphite, which occurs in gneiss in False Bay.

The Purbeck Beds of Southern France.—At a recent meeting of the Société géologique de France, M. Hébert stated that in the Mediterranean Jura of France, between Grenoble and Yenne, in Savoy,

M. Lory had found vast deposits of limestone, overlying the white-limestone with *Terebratula moravica*, which contain freshwater deposits exhibiting the characters of the Purbeck beds. This confirms what Zittel said some time ago, that the Purbeck beds and the upper Tithonian were formed during the same epoch.

The Origin of the Wealden Formation.—At the meeting of the Geological Society of London, held on the 20th March, Mr. C. J. A. Meyer directed attention to the probable origin of the Wealden beds of the south-east of England. He doubted the correctness of the view which derives them from the delta of a single river, regards them as a fluvio-lacustrine rather than a fluvio-marine deposit, and attributes their accumulation to the combined effect of several rivers flowing into a wide but shallow lake or inland sea. The evidence adduced in favour of this theory is mainly as follows: the quiet deposition of most of the sedimentary strata, the almost total absence of shingle, the prevalence of such species of Mollusca as live in nearly quiet waters, the comparative absence of broken shells such as usually abound in tidal rivers, and the total absence of drift wood perforated by Mollusca in either the Purbeck or Wealden strata.

The Habitat of Brachiopoda in Former Epochs.—J. Fuchs, of Vienna, in the columns of the *Verhandl. der k. k. geol. Reichsanstalt* (No. 6, p. 1), calls attention to the fact that, contrary to the habits of existing kinds of Brachiopoda, now found at great depths, the extinct species of former epochs lived on shallows and shores. He illustrates this remarkable fact in the Pliocene of Sicily and Calabria, consisting of two deposits, chalky marl with an abundant fauna, identical with the present Mediterranean fauna, and a littoral deposit with oysters, *Pecten*, *Balanus*, &c., as well as enormous numbers of Brachiopoda, which are collected in vast banks, and which are entirely wanting in the deep-sea deposit. The same phenomenon is observed in the basin of Vienna, where the large *Terebratula* occurs, not in the deep-sea deposits, but invariably in the littoral zone, associated with *Balanus*, *Patella*, *Clypeaster*, &c.; the same feature presents itself in the Crag of England and the Tertiary of Doberg, near Bünde. Deposits of Mesozoic and Palaeozoic periods no less strikingly illustrate this fact. We may mention the Brachiopoda deposits of the Quader sandstone, the Stramberg coralline limestone, the Nattheim coral Rag, the middle Lias of Fontains-Étoupefour, the Hierlatz beds, and the Cassian bed, and, among the Palaeozoic rocks, the *Stringocephalus* limestone, Wenlock rocks, &c. In all these strata we find Brachiopoda associated with large corals, bivalves with thick shells, and phytophagous Gasteropoda, and rarely, if ever, do we meet with them in the deep-sea deposits of these formations.

Age of the Rook-Salt and Sulphur Deposits of Sicily.—By the researches of S. Mattura (*Memorie per servire alla descrizione della carta geologica d'Italia*, publ. del R. Comitato geologico del Regno, vol. i. p. 53, 1871) it appears that these beds belong to two different horizons, the first being most probably of Oligocene age ("Miocene inferiore" of the author), and the latter belonging to the true Miocene. It is, moreover, probable that the marine deposits of the Miocene were separated into two portions by a freshwater deposit and a stratum bearing gypsum and sulphur.

Corundum of North Carolina.—Corundum has long been known to occur in Franklin Macon Co., N. C., in large loose masses. Through the energy of Colonel C. W. Jenks the masses have been traced to their source in veins in the Blue Ridge about 2500 feet above the sea-level. The chief vein, four feet in width, is made up of crystalline masses or isolated crystals of corundum, of a fine blue, greyish-white, or red colour, mixed more or less with the crystallized chlorite occurring with it. (*Am. Jour. Sc.* April, p. 301.)

Two New Ornithosauroids from the Cretaceous of Kansas.—In the *American Philosophical Society's Journal* for March, D. Cope describes two new species of Ornithosaurian, which resemble in their vast dimensions the pterodactyles of the English chalk and greensand. The specimens consist chiefly of portions of the anterior limb, of metacarpals and phalanges. Some of the phalanges of the claw-bearing digits are remarkable for their comparatively large diameter, a peculiarity stated by Seeley to characterize the species of his genus *Ornithochirus*.

The Cretaceous Fishes of Kansas.—The same author, in the January number of the above journal, gives a list of all the fishes of the Cretaceous period of Kansas, which shows the remarkable synchronism existing between the chalk formations of Kansas and England. Out of twenty-five genera of fishes only three are peculiar to Kansas.

A New Fossil Butterfly.—According to the *American Naturalist* for March 1872, p. 179, S. H. Scudder has discovered a new species (and genus) of butterfly from Aix. It is preserved in the Marseilles Museum, and has been named *Satyrites Reynesi*, after the director. The specimen mainly consists of the two fore-wings, the venation of which is very perfectly preserved. Though nearest to the East Indian *Debis*, it has the form and general appearance of *Portlandia*.

A Giant Trilobite.—At a recent meeting of the Geological Society of France (*Revue scientifique*, March 30, 1872) M. Bayan showed a tri-

bite from Angers, which has a length of not less than from 70 to 80 centimetres, or a size nearly double that of the largest known specimens. M. Bayan believes it to be allied to the genus *Lichas* and the species *L. Heberti*.

Chemistry.

Oxidation of Gases with Chromic Acid.—E. Ludwig (*Ann. der Chemie*, April 1872, 47) has published the results of his investigation of the oxidizing action of this acid of some of the gases. The gas to be examined was collected in a eudiometer over mercury, and the concentrated acid introduced in a ball of dried plaster of Paris. Carbonic oxide is converted at ordinary temperatures into carbonic acid, and can subsequently be determined by absorption with potash; the author suggests the employment of this reaction for the detection of carbonic oxide in gaseous mixtures. 20 cc. of the oxide were converted into acid in from eight to ten hours at ordinary temperatures, and in three hours at 35° C. Hydrogen will take oxygen from chromic acid : 35·8 cc. of this gas in contact with the acid were reduced to 16·5 cc. in forty hours at 17° C., and in eighty-six hours had been completely converted into water. Marsh-gas undergoes no change, not a trace of carbonic acid being detected in it after a week's exposure to the concentrated acid. Chapman and Thorp have previously shown that at higher temperatures chromic acid converts ethylene into carbonic acid and water; at ordinary temperatures, however, formic and probably acetic acid are also produced. When the reaction is complete, the gas will have expanded one-third of its bulk, and be found to consist of carbonic acid only. Had all the carbon of the ethylene been oxidized to carbonic acid, the volume of the gas would have been doubled.

Conversion of Albuminoids into Urea by Potassium Permanganate.—The accuracy of the results of Béchamp's observations on this question having recently been doubted, E. Ritter (*Comp. rend.* 73, 1219) repeated Béchamp's experiments, and has arrived at the same conclusions as that observer. Albumen, fibrin, and glutin were in part converted into urea; 30 grammes of albumen gave 0·09 grammes of urea, the same amount of fibrin only 0·07 grammes; while the like quantity of glutin furnished about 0·3 grammes; in the last case Ritter observed a second crystallized product, which he is now investigating. During these operations of oxidation a moment arrives when heat should be applied and permanganate added with great caution, lest the reaction go too far.

Conversion of Cane Sugar into Grape Sugar by the Action of Light.—Early last year E. M. Raoult (*Compt. rend.* 73, 1049) placed equal volumes of a solution of 10 grammes of white cane sugar in 50 grammes of water in two tubes, which were sealed after their contents had been boiled for a short time. They were both exposed to the same temperature for five months, one in darkness, the other in the light. At the end of this period both solutions were perfectly clear and free from germs; the contents of the former tube gave no turbidity with alkaline copper solution, the liquid in the latter a strong reaction, one half the sugar having been changed into glucose.

Bytownite.—An examination of some microscopic sections of this compact non-crystalline substance has convinced F. Zirkel (*Mineral. Mittheil.* No. 2, 61) that it can no longer be regarded as a distinct member of the felspars. Though presenting to the eye the appearance of homogeneous structure, he finds it made up of four distinct minerals: a triclinic felspar, the crystals of which are sometimes 4 mm. in length, tufts of crystals of hornblende of various shades of green, granules of quartz and of magnetite. The structure throughout is micro-granitic, without a trace of matrix not identical with one or other of these minerals. Bytownite has a constitution similar to that of the kugeldiorite of Corsica, and accords in chemical composition in a remarkable way with it, as well as with a so-called anorthite-augitic rock from Carlingford. All these agree in a low percentage of silica and alkalis, a large proportion of lime, and very large amount of alumina. The microscope, however, has shown that bytownite is not a mineral species, but a mixed crypto-crystalline rock, which will have to be excluded from the classification of the felspars proposed by Tschermak, who placed it between labradorite and anorthite.

Isuretin, a Base Isomeric with Urea.—A paper by W. Lossen and P. Schifferdecker, on the mode of formation and chemical characters of isuretin, is published in *Zeitsch. der Chem.* vii. 594. This base is produced when an alcoholic solution of hydroxylamine is left in contact with strong hydrocyanic acid for two days. The mixture is then evaporated at about 30° to 40° C. and allowed to cool, when isuretin separates in large crystals that can be recrystallized from moderately warm spirit. 190 grammes of hydroxylamine nitrate gave about 60 grammes of isuretin, or half the theoretical amount. During the preparation of its salts, of which the hydrochlorate, sulphate, picrate, and others, have been minutely studied, the temperatures of the solutions had to be kept as low as possible, to prevent decomposition and formation of ammonia salts. When heated alone, it decomposes with energy, yielding ammonium carbonate and ammelide. Hot water also destroys it, urea and

biuret being among the products of the action. The authors are as yet unable to assign a rational formula to their new base; they conclude, however, from the rapidity of its decomposition at higher temperatures, as well as from the readiness with which it colours iron chloride and reduces silver solutions, that isuretin is still a derivative of hydroxylamine. Should this be the case, they give a preference to the following formulae :—



The Changes in Colour of Manganese Chloride.—The chloride of this metal, when in solution, develops hues as varied as its oxides do. According to F. W. Krecke (*Journal für prakt. Chem.* 1872, 106), a solution of the rose-coloured crystals in from ten to twelve pints of water is, whether cold or boiling, devoid of colour; when evaporated, it becomes bright red, the tint increasing in depth with the concentration of the liquid. During evaporation at temperatures above 70° the redness attains its greatest intensity when the liquid contains 15 per cent. of salt. With further concentration an orange tint makes its appearance, and as soon as 20 per cent. of salt are contained in the solution, it becomes of a bright yellow, resembling that of weak potassium chromate. If it now became cold, the yellow changes to the original rose colour. Analysis demonstrated that by the original change from rose to yellow no combined acid was evolved, the yellow solution having the composition indicated by the formula $\text{MnCl}_2 + 2\text{H}_2\text{O}$. Further evaporation between 70° and 100° C. develops a green colour, which finally rivals that of a strong solution of a nickel salt; this again on cooling changes to yellow, and eventually recovers its rose tint. Here, it appears, a little acid, about 1·6 per cent., is liberated, the decomposition beginning when the solution contains 36·9 per cent. of manganese chloride, and possesses a composition represented by the formula $\text{MnCl}_2 + 12\text{H}_2\text{O}$. The green colour is not a result of the loss of acid, but is due, the author observes, to the presence of anhydrous chloride in the solution.

Chemical Constitution of the Leaves of *Ampelopsis hederae*.—The leaves of the Virginian Creeper are known to give a very strong acid reaction, but beyond the determination of the presence of tartaric acid in them by Wittstein very little is known of their chemical characters. They have recently been examined by E. von Gorup-Besanez (*Ann. der Chem.* 1872, parts 2 and 3, 225). In leaves gathered in June he found acid potassium tartrate, neutral calcium tartrate, and calcium sulphate, gum and sugar, probably a mixture of levulose and dextrose. The ash contained 24·6 per cent. of potash, 34·4 per cent. of lime, 8 of phosphate of iron, and 5·8 of phosphoric acid. Other leaves, gathered in September, had a somewhat different composition. Though the crystals deposited from their extract were found to be calcium tartrate only, the liquid contains pyrocatechin (oxyphenic acid), and the lime salts of malic and glycollic acid. *Vitis vinifera* is the only other plant in which the latter acid has yet been found. As Hoppe-Seyler has shown that pyrocatechin is formed when carbon hydrates are heated with water under great pressure, as well as by treating them with acids, the discovery of this substance in the living plant is not without interest to the physiological chemist.

Devitrification.—Benrath attributes the many failures which have attended enquiries into the change that glass undergoes by long exposure to the temperature at which it becomes soft to the imperfect removal of the unchanged glass from the crystals that were examined. He finds (*Der Naturforscher*, 1872, No. 9, 70) that hydrofluoric acid acts more easily on transparent than devitrified glass, and has used this reagent to separate them. A comparison of the composition of a specimen of plate-glass before and after etching showed that, though the percentage of silica in the residue had but slightly changed, that of lime had considerably increased. A specimen of the same glass, after devitrification and treatment with hydrofluoric acid, lost but little of its lime, while the percentage of silica had increased 8·6 per cent. The author assumed therefore that devitrification consists in the separation of more acid and consequently denser silicates from the melted glass. To test this, a very acid glass of the formula $\text{NaO}, \text{CaO}, 8\text{SiO}_2$, was prepared, and readily devitrified. When cold, its mass was chiefly made up of small spherular bodies, from which the less abundant transparent portions could easily be detached. The former by the above treatment yielded crystallized silicic acid. The separation of silica in this form, as well as that of felspar, was also observed in basic devitrified glasses. The author regards this modified glass, not as a mixture of several silicates having three or four equivalents of acid, but as a solution of silicic acid in a glass, probably of the composition RO_2SiO_4 .

Physics.

The Heat-Spectra of the Sun and Lime-Light.—The discontinuity of the solar heat-spectrum was first determined by Sir John Herschel, who with a flint-glass prism threw a spectrum on paper blackened with soot and moistened with alcohol, and estimated the

thermal effect of the spectrum by the time of drying. He observed that the moistened surface dried in a series of four distinct spots. Fizeau and Foucault also noticed the existence of bands in the ultra-red rays; later observers, however, who have investigated the distribution of heat in the solar spectrum delineate the heat-curve as continuous. M. Lamansky (*Phil. Mag.* April, 1872, from *Monatsbericht Akad. Wiss. Berlin*), during his experiments on this subject, noticed that, beginning from the line D and advancing towards the ultra-red end of the spectrum, the deflections of the galvanometer, corresponding with the heat-effects, become, though not proportionately, stronger until they attain a certain maximum and then diminish; this takes place four times, and shows that the ultra-red rays are interrupted in three places by breaks or bands. These bands have a corresponding position in spectra produced either by a glass, bisulphide of carbon, or rock-salt prism, and differ only in becoming broader when the prism used has a greater dispersive power. The breaks or bands are not equally wide; the first is much more sharply separated from the second than the second from the third. Parallel experiments with rock-salt apparatus—made the one in the morning and the other about noon—show that the breaks become somewhat narrower with increasing altitude of the sun. They were also rather deeper on the days when the relative moisture of the air was greater. M. Lamansky does not consider the observations sufficient to warrant our ascribing these bands to atmospheric absorption. In all the experiments it was observed that the heat-effect of the solar spectrum after attaining its last maximum sinks suddenly. A similar examination of the lime-light spectrum showed that there was no break of continuity as in the solar spectrum, and that the position of maximum heat-effect is much farther from the end of the visible red in the former than in the latter. In other words, with the feebler sources of heat the intensity of heat-effect attains its maximum for rays of greater wave-length than is the case with more powerful sources of heat.

Absorption-Spectra of Gases and Vapours.—M. Gernez (*Comp. rend.* 1872, Nos. 10 and 12) finds that all more or less coloured gases are capable of yielding absorption-spectra if only a sufficient thickness be examined. For this purpose he encloses the gas in a long tube terminated with parallel glass plates, and transmits a ray of light from a Drummond lamp along the axis of the tube, the ray on emerging being examined by the spectroscope. In this way the spectrum of chlorine, enclosed in a tube 468 decims. in length, exhibits a number of fine lines that commence a little beyond D and extend nearly to the violet, which is entirely absorbed. Chloride of iodine, in a thickness of 30 centims., furnishes a spectrum very different from that of chlorine, but analogous to those of bromine and iodine. Sulphur vapour was examined by heating sulphur in a porcelain tube 50 centims. long, closed by parallel glass plates. As soon as the sulphur vapourises, it produces a gradual extinction of the spectrum, commencing in the violet and extending to the red, no lines being visible. On continuing the heating, however, the vapour begins to allow other rays than the red to pass, and as the yellow, green, blue, and violet portions of the spectrum reappear, a series of lines commencing in the violet and extending to the green become visible. Selenious acid gives a system of absorption-lines lying chiefly in the violet and blue.

The Specific Heat of Carbon.—An important paper on this subject appears in the *Ber. der Deut. Chem. Gesell. zu Berlin*, of April 22, 1872, p. 303. It was held by Dulong and Petit, as a result of their experiments on twelve of the metals, that the product of the atomic weight and specific heat, in other words, the so-called atomic heat, had the same value, about 6.5, for all elements. Later observers have remarked striking departures from this law, and a comparison which H. F. Weber makes in the paper alluded to of the numbers obtained by Regnault, de la Rive, Kopp, and Willner, as representing the specific heat of carbon, clearly demonstrates that the different allotropic modifications of this element have very different specific heats, no one of which obeys Dulong and Petit's law, while the values assigned by these physicists to the specific heat of any one modification greatly differ. This he attributes to the fact that the specific heat of carbon in all its modifications varies with the temperature in a degree that would scarcely be supposed. By experimenting on two large diamonds he finds that the specific heat of carbon increases with the temperature to a degree surpassing any other substance, the specific heat of diamond being trebled by a rise of temperature from 0° to 200° C. The research was conducted in the physical laboratory of Prof. Helmholtz, in Berlin.

The Sun's Rotation.—The rate of the rotation of the sun has been measured by Zöllner and Vogel with the aid of Zöllner's reversion spectroscope (*Revue scientifique*, March 30, 1872). The sun turns from west to east, his eastern edge moving towards the earth, the western from it. The rays emitted by the eastern edge ought, when examined with a prism, to be found to be more refrangible than those of the western edge. The displacement of F was carefully determined, and found to be about one-hundredth of the distance between the two sodium lines. This is a variation of refrangibility corresponding with a velocity at the solar equator of 2.59 kilometres per second.

On the night of the 15th–16th March, Prof. R. Luther, of Düsseldorf, observed another minor planet (118) Peitho. He gives the following data:—Düsseldorf mean time: 1872, March 15, 14h. 18m. 59.6s. R. A. in time: 12h. 7m. 26.73s. North Dec. +10° 17' 26.5". *La Revue scientifique* for April 15 records the discovery of two more planets, one, of the 11th magnitude, by M. Paul Henry, of Paris; the other, also of the 11th magnitude, by M. Borely, of Marseilles.

New Books.

- ANNUAIRE MÉTÉOROLOGIQUE de l'Observatoire de Paris pour l'an 1872. Paris: Gauthier-Villars.
- ANNUAIRE pour l'an 1872, publié par le Bureau des Longitudes. Avec des notices scientifiques. Paris: Gauthier-Villars.
- BAYLE, D. L'Electricité appliquée à l'art de la guerre. Le Mans: Monnoyer.
- BOWRING, Sir J. The Decimal System in Numbers, Coins, and Accounts. New Edition. Stanford.
- CHEVREUL, M. D'une erreur de raisonnement très-fréquente dans les sciences du ressort de la philosophie naturelle qui concernent le concret, expliquée par les derniers écrits de Chevreul. Paris: Firmin Didot.
- COHN, F. Die Entwicklung der Naturwissenschaft in den letzten fünf und zwanzig Jahren. Breslau: Kern.
- EICHWALD, E. v. Analecten aus der Palaeontologie und Zoologie Russlands. Leipzig: Voss.
- EICHWALD, E. v. Geognostisch-palaeontologische Bemerkungen über die Halbinsel Mangischlak und die Aleutischen Inseln. St. Petersburg: Buchdruckerei der K. Ak. der Wiss.
- FITTIG, R. Das Wesen und die Ziele der chemischen Forschung und des chemischen Studiums. Leipzig: Quandt.
- HANKEL, W. G. Ueber die thermoelektrische Eigenschaften des Schwerspathe. Leipzig: Hirzel.
- KÖLLICKER, A. Anatomisch-systematische Beschreibung der Alcyonarien. I. Abtheilung: Die Pennatuliden. Frankfurt: Winter.
- KÖLLICKER, A. Morphologie und Entwicklungsgeschichte des Pennatulidenstammes, nebst allgemeinen Betrachtungen zur Descendenzlehre. Frankfurt: Winter.
- LAZARUS, M. Psychologischer Blick in unsere Zeit. Berlin: Dümmler.
- MANTEGAZZA, P. Quadri della natura umana. Milano: Bernardoni.
- MAUTHNER, L. Vorlesungen über die optischen Fehler des Auges. I. Abtheilung. Wien: Braumüller.
- NICHOLSON, H. A. A Monograph of the British Graptolitaceæ. Blackwood.
- TRÈMEAU DE ROCHEBRUNE, A. Études préhistoriques, anthropologiques et archéologiques dans la Charente. Livr. I. à 5. Paris: Savy.

History.

1. History of Greece from the Taking of Constantinople by the Turks to the Present Time. [Geschichte Griechenlands von der Eroberung Konstantinopels durch die Türken im Jahre 1453 bis auf unsere Tage.] Von Karl Mendelssohn-Bartholdy. I. 1870.
2. History of Italy from the Foundation of the Reigning Dynasties to the Present Time. [Geschichte Italiens von der Gründung der regierenden Dynastien bis zur Gegenwart.] Von Dr. Hermann Reuchlin. III. 1870.
3. History of Spain from the Outbreak of the French Revolution to the Present Time. [Geschichte Spaniens vom Ausbruch der französischen Revolution bis auf unsere Tage.] Von Hermann Baumgarten. III. 1871. Leipzig: Hirzel.

THIS valuable collection of separate works on the modern history of existing states, has been in continual progress ever since it was started about fourteen years ago. Each particular country being in the hands of an author, who either derives the knowledge of its institutions, or, perhaps, even his acquaintance with the leading statesmen from a personal residence, or from the most intimate connection with them—these works are likely to retain a permanent importance as specimens of conscientious contemporary historiography. Their bias is unquestionably on the side of progress. Yet, nevertheless, the principles of a sound scientific method prevail so far, that the losing side comes in for its full share of objective elucidation in the narrative.

The critical application of the sources, parliamentary and diplomatic, official documents and private letters, printed and manuscript materials, ought to be adhered to, on principle, with the same rigidity as if a period of ancient history were to be reconstructed with the help of some recently discovered inscriptions. The demand for books of political instruction like these, in a country with rising and progressive prospects, is best evidenced by the market they find; not any longer exclusively among scholars, but among a general public, deeply interested in its own destinies and the parallel development of the neighbouring countries.

For our purposes it will be sufficient to refer to the three additions which have been made to the collection in the course of the last twelve months, viz. vols. xv., xvi., and xvii., each of them connected with one of the countries forming the three southern extremities of Europe.

Professor Mendelssohn, the eldest son of the great musician, though still reckoned among the young historians of Germany, has already distinguished himself by a rapid succession of publications, chiefly in connection with the recent history of Germany and Austria, and by a more detailed production in the shape of a biography of Count Capodistria. The late Professor Gervinus, eminent in so many branches of political and aesthetical literature, first drew his attention to the history of modern Greece, which Dr. Mendelssohn himself has visited three times since 1860. It appears from his short introductory remarks, that no works or materials whatever, which have been published on the subject in Greece, Germany, England, France, and even Russia, have escaped his notice. In mentioning them he is fond of adding some short pointed observations on the individual value of these productions, e. g. on Tricoupi's, Philimon's, and Finlay's writings. Baron Prokesch-Osten's *Geschichte des Abfalls der Griechen* has been reviewed at large by him in *Sybel's Zeitschrift*, vol. xviii. Our author has a decided talent for gleaning much curious matter, which others who went before him had left untouched. Not satisfied with admission into the record offices at Vienna and Berlin, he owes the opportunity of inspecting some of the most secret documents, both originals and the copies of letters of a more private nature, to the friendly confidence he has met with among the Greeks themselves.

The title of the work, only the first volume of which is now before us, has the fault of promising too much. The narrative does not really begin with the conquest of Constantinople in 1453, but rather with the first symptoms of national insurrection among the Greeks, when Catherine II. was waging her first war against Turkey, which led to the humiliating treaty of Kutshuk Kainardji in 1774. Hence the first chapter of but fifty-eight pages is nothing but a well-sifted and highly readable essay on the degraded condition of the people during their long period of humiliation under the despotic sway of the Turks, on the rise of their vernacular language and literature, their manners and customs, their popular traditions and religion, on *cléphths* and corsairs. In this essay the ingenious but questionable theory of Falmerayer, as to the Slavonic origin of the modern Greeks, is once more refuted, as i taught to be, on historical as well as linguistic grounds.

The main subject, beginning of course with Rhigas, with Ali Pasha of Janina, with Prince Ypsilanti and the Hetaerists, is arranged with great skill over the bulk of the volume. The author writes in a fluent and even fascinating style, so much so that the reader will follow with pleasure and advantage the disclosure of the various nurseries from which the revolution sprang, its increasing relations with the European powers, the politics, whether separate or combined, of the latter, the state of parties, and the first constitutional

attempts of the Greeks themselves. The many extraordinary scenes, once so exciting to the generation which is now fast passing away, are well told. From Mesolonghi and the noble exertions of Lord Byron, which brought on his early death, we accompany the author to the "untoward event," the battle of Navarino, which concludes the volume. The author is stern in his condemnation of the ruinous egotism displayed on various occasions by the Greek rivals, the Philhellenes from the different European countries, or among the leading politicians in Russia, England, France, and Austria. Most important and hitherto unknown details on these points, in the shape of extracts from the diplomatic correspondence preserved at Vienna, are added in the appendix. From the indefatigable activity of the author it is to be expected that he will soon complete, in another volume, the story of the conclusion of the memorable struggle, and sketch as impartially as possible the vicissitudes under which its offspring, the present kingdom of Greece, has hitherto existed.

The first two volumes of Dr. Reuchlin's—a descendant by-the-by of his namesake the great humanist and contemporary of the Reformation—work on Italy, published in 1859 and 1860, have long been without a continuation. They threatened indeed to stop short with the second defeat and abdication of Charles Albert in 1849. For several years the rising of Italy, and the success of a national and united policy in that country, were nowhere so unpopular as in the south of Germany, especially in Würtemberg, where Austrian sympathies predominated largely down to the great catastrophe of 1866. The author, a frequent visitor in Turin and Milan, Florence and Rome, and on intimate terms with the chief patriots and statesmen—Cavour, Pallavicino, Ricasoli, and others—hints that his Suabian countrymen used to deride him as the "Cavourle," the little Cavour. However he has always been busy at work with his favourite subject. Two more long residences in Italy, among his best informed and influential friends, have provided him with a great amount of trustworthy matter, probably of more direct value than the average of official state-papers seems to be. After the way had been smoothed by a number of articles in some of the leading newspapers, in several historical and political journals of Germany, Dr. Reuchlin has given us at last a new instalment of his work. The stout volume contains hardly more than another decade, in which, moreover, Naples and Sicily are for the present omitted. Upper and Central Italy and Piedmont appear in the foreground. The new gathering of strength for a single great object, Cavour's first ministry, his coalition with the Emperor Napoleon, the war of the year 1859, the treaty of Villafranca, the condition of Modena and Parma, of the Papal States and Tuscany, and the severe crisis which led in January of the following year to Cavour's second and last government—all these subjects are treated in succession most circumstantially, but in intimate connection with each other. The author promises to relate, in a fourth volume, the end of the Bourbons in Naples, and the first epoch of the Italian kingdom down to the autumn of 1866, trusting "that by the fall of Napoleon many an Italian mouth will be unlocked." Unfortunately Dr. Reuchlin is a rather heavy and clumsy writer, so much so, that his great advantages are to a certain extent neutralized by a certain incapacity of arranging his materials. In spite of the author's good humour and great affection for the prosperity of Italy, the reader cannot help wishing that so much excellent instruction had been given him in the plainest and most natural manner possible. Of course the usual difficulties of the historian are considerably increased by the politics of a country, which, until very recently, had many separate

centres of public life, which at all times were powerfully influenced from abroad. Even the peculiar nature of diplomacy, which in that country is so often akin to conspiracy, requires from an historian more than common literary power. But, nevertheless, though the author will not find many patient readers to peruse his book from beginning to end, he has provided the student and the politician with an admirable store-house for the period in question, full of the soundest information, and based upon an amount of reading among the most out-of-the-way papers, journals, and pamphlets, which very few other friends of Italy can have acquired to the same extent.

Professor Baumgarten had published a remarkable book on Spain, at the time of the French Revolution, before he undertook his present work, which, as many will agree, may be designated as the very best of the collection. In his second volume he narrated the events down to the year 1825, when the absolute government of Ferdinand VII. had been restored by the help of the French, but at the cost of nearly all the colonies and of the vital organs of the state itself. Besides the printed literature in the respective European languages, the author had the dispatches written from the Court of Madrid by the Prussian diplomatic residents at his disposal, and spent part of the year 1868 in Spain. He could thus observe with his own eyes certain changes for the better, which the country is unquestionably undergoing since 1820; and he, moreover, derived inestimable information from politicians and literary men, who were active either at the time or had been so at an earlier period. On the other hand, it is not to be wondered at, that the Spanish Record Office, under the Narvaez government, was closed against him. All short-comings, however, with regard to materials—a complaint most characteristic of Spanish affairs in general, witness the writings of the late Mr. Richard Ford—are most agreeably compensated by the good taste, finished style, and straightforward judgment, in which Dr. Baumgarten's work excels.

The third and last volume, which we wish most especially to recommend, treats mainly of the sad and tumultuous events which the Spanish nation had to endure between 1825 and 1840. Through a wilderness of apostolic conspiracies and liberal pronunciamientos, we accompany the most despicable Bourbon king to his wretched end, which was the signal for the outbreak of a war disastrous beyond comparison, civil and dynastic at the same time, an ordeal in which the old and the new elements to all appearance annihilated each other. Approaching the subject with somewhat of doubtfulness, we must confess that we never have read a more attractive account of the struggle between the Carlists and Christinos, the monotonous cruelty and ineffective results of which seem hardly worthy of the labours bestowed upon them by a conscientious historian. Yet the reader will soon accord the same praise to the five chapters in which the Basques are introduced with their ancient f ueros and most primitive institutions. It is only such a race that can produce a party leader and military genius like Zumalacarrégui, by whose extraordinary discipline and example the cause of Don Carlos was chiefly supported through the successive campaigns of seven years. The awful trial of strength, which amid the listless attention of Europe or with the hesitating help of some few governments like the English Whig Cabinet, was ultimately decided in favour of Isabella II. and her mother, did not issue merely in a negative solution. Our author now and then very adroitly uplifts the veil for a view both retrospective and prospective. In his opinion King Ferdinand himself, on his return from captivity in 1814, destroyed most culpably the very conditions of Roman Catholic monarchy

in a country which before all others has ever been founded on orthodoxy and royalism. During the period of the civil war whatever had been left of old Spain was swept entirely away, whilst the resuscitation of a new national and political life has met with more checks than prospering chances. Don Carlos, as our author intimates, rushed inevitably on his ruin, owing to "the perversity of his principles and aims, and their glaring incompatibility, not only with the civilization of Europe, but with any other possible prospect for Spain."

After bringing down his narrative to Cabrera's capitulation in 1840 (in which, by-the-by, as a young military adventurer, one of the heroes of 1870-71—General von Goeben—was involved), Dr. Baumgarten in another chapter sketches the course of national development during the last thirty years. He shows no mercy either to the Moderados or the Progresistas, because neither of them allowed Spain to right herself by the expression of the free will of the nation. He condemns Espartero because he wielded his thoroughly despotic sword, however necessary it had become, not only without any genius whatever, but chiefly as the mere head of a party. By his fall in 1843, argues Washington Irving, then American Minister at Madrid, the degraded country was saved from the last state of anarchy. But what have the interminable changes led to after all? In fact, there have since been only two governments of any duration, those of Narvaez and O'Donnell, both of which, in spite of their reactionary and intolerant tendencies, had to succumb ultimately to the hostility of the camarilla and the court clergy. The result of the revolution of 1856 has been a comparatively quiet and prosperous period, till the year 1863 brought a return of the former chaos. R. PAULI.

The Pope of Rome and the Popes of the Oriental Orthodox Church. By the Rev. C. Tondini, Barnabite. Longmans, 1871.

THE object of Father Tondini's book is professedly controversial. He desires to contrast the practical working of the principle of "monarchy," as exhibited in the Roman papacy, with the patriarchal or episcopal government of the Oriental and especially of the Russian Church, which he regards as the one essential difference between the two communions. For we are glad to observe that, in common with many leading theologians on both sides, and with the recent Munich Congress, he is fully convinced "that the much vexed question of the *Filioque* concerns terminology rather than dogma, and is susceptible of an amicable solution. The main design of his argument is to show that "the Oriental Orthodox Church is divided into several separate and independent *papacies*," and that the actual result is a system as purely Erastian as that under which the Church of England is administered. But, while the author's aim is controversial, it is fair to say that his argument is based on a careful analysis of facts, derived from original sources, which are here for the first time brought together within so small a compass. And the facts have an importance of their own, apart from the theological merits of the argument they are intended to subserve. The increased interest felt in the subject of late years in this country, which found expression in the warm welcome accorded to the Greek Archbishop of Syra, gives additional value to such a collection of statistics. And it is chiefly to this aspect of the work that we are anxious to direct the attention of our readers; who will be able to draw from the facts their own conclusions, which may or may not symbolize in all respects with that of the author.

The principal divisions of the Oriental Church were the Russian, under the government of the "Holy Synod" of

St. Petersburg; the four patriarchates of Constantinople, Alexandria, Antioch, and Jerusalem, and the Greek Church proper, ruled, since 1833, by the Synod of Athens; its members numbering in all about eighty millions, of whom fifty-six millions belong to the Russian Church. Practically therefore the chief interest centres in the Russian Church, though it is the youngest of the Orthodox communities, and is now wholly independent of the primatial see of Constantinople, as well from its numerical preponderance as because the Czar stands in the same sort of political relation to the Orthodox Church generally as the French sovereigns during the last few centuries have assumed towards Catholicism. But while in theory the episcopate under the four patriarchs form the governing body of the Orthodox Church in Russia, since the reforms of Peter the Great this principle has been virtually superseded. Peter, of his own authority, and not without some remonstrance on the part of his clergy, by an ukase of Jan. 25, 1721, abolished the patriarchate of Moscow, which had been established with the sanction of the four ancient patriarchs of the East, and substituted for it, as the supreme legislative and judicial tribunal for the whole Russian Church, a synod of twelve members, only three of whom were bishops, the remaining nine being made up by three archimandrites, three hegoumens, and three protopopes—all simple priests. Catherine II. limited the number to six, and through later modifications it now consists entirely of bishops, except that the Czar's confessor and the head chaplain of the army and navy are *ex officio* members. But the Synod, however composed, represents not the inherent authority of the episcopate, but the delegated authority of the Czar, just as the Judicial Committee represents the English Sovereign. As the legal code expresses it, "the imperial authority acts in the administration of the Church by means of the Most Holy Governing Synod appointed by it." An elaborate oath is exacted of the members of this "spiritual college," binding them to unconditional submission to the Czar, and to the obligation of promoting his service and interests to the utmost of their power—not unlike the oath required of Catholic bishops to promote the *Regalia Sancti Petri*—and also containing an express acknowledgment that the Czar is "the supreme judge of this spiritual college." The Czar therefore exercises the same supreme jurisdiction over the Russian which the Pope exercises over the Western Church, but, as he makes no claim to infallibility, his *doctrinal* power is allowed by Father Tondini to be strictly limited by the dogmatic canons of the ancient Councils; the *disciplinary* canons he can alter or abrogate at pleasure. As it is expressed by Schnitzler, a writer quoted with respect by our author: "S'il s'agissait d'être juge dans un débat sur des matières de doctrine, l'Empereur renverrait l'affaire au Saint Synode ou réunirait un Synode spécial, et dans un cas majeur il enverrait prendre l'avis des quatre Patriarches d'Orient. Il ne se réserveraît à lui-même directement que l'exécution de la décision rendue, de la sentence prononcée." The author hardly appears to appreciate the full force of this distinction when he describes the supremacy of the Czar as in all respects equal with that claimed by the Popes, at least in view of the recent Vatican decrees. However the Czars formally style themselves, "Heads of the Church," and every Russian bishop is obliged to present annual reports to the Governing Synod of the state of his diocese, as Roman Catholic bishops are bound every three years for a similar purpose to visit the *limina apostolorum*. That the Czar should have the absolute appointment of all the bishops does not seem a very important distinction. Catholic sovereigns and governments exercise the same right wherever the Church is in any sense established, and even the Protestant king of Prussia

has an absolute veto on any nominee who is not a *persona grata* to himself. It is more strange that Russian priests should be ordered to reveal any treasonable plot disclosed in confession, and that on the ground of our Lord's injunction (Matt. xviii. 17), "Tell it to the Church." The state of things in Turkey and Greece is not substantially different. The Synod of Nauplia, composed of all the Greek bishops, in 1833 acknowledged the King as the supreme head (*ἀρχηγός*) of the Hellenic Church, where, however, he interferes much less than the Czar does in Russia. The Sultan appoints and can depose the four Patriarchs of the Byzantine Church, and to him, according to the Encyclical issued by them in 1848, are referred such "extraordinary and difficult questions" as they cannot settle among themselves. So far the author must be held to have made out his case, that in none of the three principal branches of the Oriental Church do the bishops really constitute, as according to orthodox doctrine they ought to constitute, the supreme authority.

It is also, we think, clearly made out that the various branches of the Orthodox Communion have no such external and governmental unity as exists under the jurisdiction of the Papacy. But when the author ridicules the complaint of Greek theologians, that "the doctrine of a visible head of the Church destroys her unity," he seems to us hardly to have grasped the point of the criticism. What they mean is probably, what some high Catholic authorities and some popes have themselves admitted or affirmed, that the centralising policy of the mediaeval popes contributed materially to bring about and perpetuate the separation of East and West, and this view is confirmed by Tondini's avowed conviction that the difference hinges exclusively on the form of Church government. We cannot enter here on the wide and much vexed question of ecclesiastical "jurisdiction," about which various opinions have been advocated by Catholic theologians, who are by no means agreed in regarding the divinely ordained government of the Church as a pure monarchy. Lacordaire, for instance, insists on its combining and harmonizing the three typical forms of government, monarchy, aristocracy, and democracy. Nor does history altogether bear out the assertion of the "patent fact" that the extreme claims of papal prerogative are the surest if not sole guarantee for the authority and independence of the episcopate. Certainly very opposite statements were made by many bishops at the Vatican Council. But the real interest of Tondini's book lies, as we said before, not in his theological opinions or even in his controversial application of the argument, but in the mass of statistics not generally accessible which he has collected in a brief and readable volume. For controversial purposes it should be read in connection with such works as *Janus* or Schulte's *Die Stellung von Concilien, Päbsten und Bischöfen*.

H. N. OXENHAM.

Intelligence and Contents of the Journals.

M. Michelet has begun a continuation of his great history under the title of *Directoire—Origine des Bonaparte*. There are some curious details on the mode in which Bonaparte was enabled to obtain the necessary supplies for the army of Italy in 1795. The author's main object, however, is to describe the growth of the "military system" and its long struggle with the "industrial systems" of England. The preface contains some notices of his own life, and it is needless to say of Michelet that his aversion to England still displays itself vividly and is sometimes extremely absurd.

Literarisches Centralblatt, March 16.—Notices the publication of Conrad Justinger's *Chronicle of Berne*, one of a series of old Swiss chronicles now being critically edited; and the conclusion of Rossbach's *Geschichte der Gesellschaft*, the 4th part contains the history of the rise of the Middle Classes, especial attention being devoted to England.—March 30.—Notices Paul Meyer's *Les derniers Troubadours de la Pro-*

rence and the *Vie de S. Alexis*, both valuable for French philology.—April 13.—Notices the concluding volumes of Winter's *History of the Cistercians in North East Germany*, and criticizes unfavourably Klippel's *Life of General von Scharnhorst*.—April 20.—Reviews Tourtal's *Dispatches of Ridolfi*. Ridolfi was Florentine Resident at the Imperial Court during the Diet at Ratisbon in 1641, but we get little new information from him.

The Growth of the English Constitution from the Earliest Times, by E. A. Freeman, contains the substance of some lectures delivered at Leeds and Bradford. Mr. Freeman's object is to give in a popular form the results of his researches into our early history, and stress is laid on two favourite ideas—that of the continuity of our history, and that of the revival in later times of early institutions which had perished after the Conquest. The unwritten rules of our constitutional law are also considered, and it is shown how important they have tended to become of late. Every one knows that in theory the prerogatives of the Crown are as great as ever, while practically the real power is in other hands. The error of many writers on the constitution has been that they have looked merely to the outward forms and not regarded the living forces that act through those forms.—We should notice also Mr. Freeman's address as President of the Somersetshire Archaeological Society, in which he shows the importance of connecting local enquiries with the general history of the country. We might point to his own account of York and Exeter and Lincoln, in the 4th volume of the *Conquest*, as illustrating his meaning. Similarly in an address to the Historical Section of the Archaeological Institute, at its annual meeting held this time at Cardiff, he illustrates from local knowledge the succession of races in Great Britain, the fusion of which has made the English nation.

Altpreußische Monatschrift, February-March.—Contains an account of the MSS. illustrating the history of "Preussen" (Prussia in the narrower sense) in Prince Czartoryski's Library at Paris; a document of the Teutonic order in 1316—one of our earliest original documents in German; a full account of the tumuli opened in the district (Wulfstan's report to King Alfred is the earliest description we have of the mode of interment among these tribes), which is worth comparing with Canon Greenwell's explorations in Yorkshire; some extracts from unprinted Russian chronicles; and a notice of the original MS. of Copernicus' *De Revolutionibus Orbium Coelestium*.

The newly discovered fragment of John of Antioch, published by Mommsen (*Hermes*, vi. p. 322 ff.), from Professor Geppert's transcript of the MS. in the Escorial, contains an account of the death of Odoacer after his surrender to Theodoric, confirming a previous conjecture on the subject by Professor Felix Dahn, who announces his intention of shortly discussing the whole passage. Ten days after the capitulation, Theodoric sent for Odoacer to his palace; as he entered, two men seized his hands as if about to make a request; this was to be the signal for assassins from the next room to enter, but their resolution failing, Theodoric himself ran his rival through with his sword, exclaiming as he withdrew it, "the wretch (*τὸς κακός*) had not even a bone in his body." Odoacer's widow, "Sunigilt," was starved to death in prison, and their son, Thila, put to death on his return from banishment.

The 17th volume of the *Transactions of the South Slavonic Academy* (*Rud Academije Jugoslavenske*) contains an interesting dissertation of Dr. Racki on the origins of the Croatian kingdom; and the second part of Prof. Tagic's study upon the Progress of Slavonic philology in the last years. Prof. Tagic has been recently appointed by the Russian government Professor of Philology at the University of Odessa.

Theolog. Literaturblatt, March 12.—Notices the conclusion of Caravita's *I Codici e le Arte a Monte Cassino*.—A. von Reumont has a very full account of Adolf Trendelenberg's *Kleine Schriften*, especially as regards the account of Machiavelli and his object in writing *The Prince*.

New Publications.

- ARCHIV FÜR ÖSTERRE. GESCHICHTE.** 47. Bd. 2. Hälfte. Wien : Gerold's Sohn.
BEER, A. Die Zusammenkünfte Josefs II. u. Friedrichs II. zu Neisse und Neustadt. Wien : Gerold's Sohn.
CHÉRUEL, A. Lettres du Cardinal Mazarin pendant son Ministère. Tome 1^e (Déc. 1642—Juin 1644). Paris. (Collection de Documents sur l'Histoire de France.)
COOPER, Thomas, The Life of. Written by himself.
D'OKSZA, Th. Histoire de l'Empire ottoman depuis sa fondation jusqu'à la prise de Constantinople. Tome 1^{er}. Constantinople.
DU MESNIL-MARIGNY, Histoire de l'Economie politique des anciens peuples de l'Inde, de l'Egypte, de la Judée et de la Grèce. 2 vols. Paris : H. Plon.
ELGIN, Letters and Journals of James, Eighth Earl of, Governor of Jamaica, Governor-General of Canada, Envoy to China, Viceroy of India. Edited by Th. Walron, C.B. With a Preface by A. P. Stanley. Murray.

- FREEMAN, E. A.** The Growth of the English Constitution from the Earliest Times. Macmillan.
HERMINIARD, A. Correspondance des Réformateurs dans les pays de langue française. Tome IV. Basel : Georg.
HOOKHAM, Mrs. The Life and Times of Margaret of Anjou. 2 vols. Tinsley.
LEBLAN-DAVAU. Recherches historiques et statistiques sur Auxerre, ses Monuments et ses Environs. (Auxerre, 1871.) Paris : Du-moulin.
LEVI, L. History of British Commerce, and of the Economic Progress of the British Nation, 1763-1870.
LÖSERTH, J. Die Geschichtsquellen v. Kremsmünster im XIII. u. XIV. Jahrh. Wien : Braumüller.
MICHELET, J. Histoire du xix^e Siècle. Directoire—Origine des Bonaparte. Paris : Baillière.
MOLESWORTH, W. N. History of England from 1830. Vol. II. Chapman and Hall.
PAZ-SOLDAN, M. F. Historia del Perú independiente. Primer periodo, 1819-22. Hâvre.
ROSSBACH, J. J. Geschichte der Gesellschaft. 5. Theil. Der vierte Stand und die Armen. Würzburg : Stüber.
SALINAS, Ant. Le Monete delle antiche città di Sicilia. Palermo.
SEGUR-DUPEYRON, P. DE. Histoire des Négociations commerciales et maritimes de la France aux XVII^e et XVIII^e siècles, considérées dans leurs rapports avec la politique générale. Paris : Thorin.
SICKEL, Th. Zur Geschichte des Concils von Trient (1559-1563). Achtenstücke aus österreichischen Archiven. Wien : Gerold's Sohn.
STATISTICA del Regno d'Italia. 5 vols. Milano.
WADDINGTON, W. H. Fastes des Provinces asiatiques de l'Empire romain depuis leur origine jusqu'au règne de Dioclétien. 1^{re} partie. Paris.

Philology.

- Scaenicae Romanorum Poesis Fragmenta secundis curis recensuit Otto Ribbeck.** Vol. I. Tragicorum Fragmenta. Leipzig : Teubner, 1871.

THAT a second edition of the fragments of Latin tragic poetry should appear within twenty years of the first is another indication of the increasing attention which the early literature of Rome is still attracting to itself, indeed a very strong one; for, as poetry, these remains are so slight, and, as compared with the corresponding fragments of the Greek tragedians, so poor and inartistic, that the reader of them, even when helped by the lucid arrangement and beautiful typography of the edition before us, is obliged to summon to his aid all the adventitious interests of a yet new subject to carry him through the volume. With this admission, this new edition of the *Fragmenta Tragicorum* may be considered an interesting, as it is beyond doubt a very valuable, accession to our knowledge of early Roman literature; and it may perhaps be said that the light which these fragments throw on Latin philology alone is enough to compensate for their tediousness as poetry. Add to this the palaeographical interest of disentangling the more and more resolvable perplexities of the authors by whom they are quoted, and the gradually increasing conviction which the careful study of those authors produces, that much which at first seems doubtful or insoluble in these venerable remains may, and probably will, find a clear and almost certain solution in the hands of the carefully trained scholars of the present generation. This is especially true of Nonius, the largest contributor to the collection, but it is likely to be more true than it is as yet of Varro, Festus, and the Grammarians; and we can hardly fail to see why it is that works like this command a steady sale, and pass rapidly into a second and third edition. There is besides the eminently German (it can hardly be said to be an English) virtue of working up all the available materials which the industry of ancient and modern scholars places within the editor's reach; M. Ribbeck's second edition in this respect is a proof of the goodness of his first. In the nineteen years

which have elapsed since the work was originally published, the most eminent scholars of Germany, Ritschl, Bergk, Mommsen, Haupt, Fleckeisen, Bücheler, Corsen, and a host of others, have either themselves emended the fragments or contributed new facts or statements which help to elucidate them. It is sad to find few or no English names, only one or two French, among them : yet we venture to think that Latin philology has received a new impulse among us, and almost hope that, if a third edition shall, as is very likely, ever be forthcoming, it will contain at least some English contributions of consideration.

The present edition differs from the first mainly in two points, its increased bulk and the absence of any discussion as to the place of the fragments in the dramas to which they belonged. Ribbeck reserves this for a separate volume ; but it is to be hoped that where plausibility is all that can be looked for, he will allow the temperate and rarely extravagant views which the essay in his first edition contains to remain substantially as they were. He has followed this course consistently in retaining the fragments in the same order and numbering as in the first edition ; a saving of time of incalculable value to the student, and which, as a principle of economy, is worth a great deal. By way, however, of supplementing his book, M. Ribbeck has prefixed a Corollarium of lxxviii pages containing a further discussion of the more doubtful fragments, with the suggestions of Bücheler, Usener, and Adolf Kiessling ; some of these seem to bear marks of haste, though they add no doubt to the interest of the book : generally the results of the Corollarium are to leave undecided what was undecided before.

Nor is it possible to speak with entire satisfaction of the conclusions at which M. Ribbeck has arrived in constituting his text. It is true that the apparatus, which is at once clear and full, enables any one who will take the trouble to form his own conclusions on the data furnished by the MSS. ; and it is equally true that where new words are inserted to satisfy the demands of the metre, these words are distinguished by brackets from the rest. Nor can it be denied that the large proportion of undoubted senarii and septenarii justifies the preference which in common with most editors M. Ribbeck shows for those metres ; and the restitutions which he has effected on this hypothesis are not few, and in some cases, we think, beyond dispute. Yet there are places where the MSS. point as unequivocally to other rhythms, bacchiac, cretic, or, as in spite of M. Ribbeck we must think, saturnian. We shall give specimens of each, beginning with the last. Nonius gives a line from the *Ajax* of Livius Andronicus thus—

*Praestatur virtuti laus ; gelū set multo
Ocius uenio tabescit,*

i.e. probably—

' *Ocius uento . . . tabescit,*

a passage which seems clear enough to justify the inference that the early writers for the stage mixed saturnians with the other exotic rhythms. Att. 558, *heu Multiber Arma ignauo inuicta es fabricatus manu*, is reduced by Hermann to senarii by inserting *ergo* after *arma*. It is easier to suppose them cretis. The line from Ennius' *Iliona*, fr. iv. Ribb.—

Age asta, mane audi, itera dum eadem istaec mihi,

must be, as Fleckeisen constitutes it, bacchiac ; and this is, if I am right in so conjecturing, the metre of part of a much disputed passage quoted by Nonius, 407, 22, in illustration of *tenacia*. It is written in the MSS. as follows : *ducet quadrupedum iugo inuitam doma infrena et iuge valida quorum tenacia infrenari minis*, i.e.—

*dūc et quadrupedēm iugo,
Inuitam doma infrena et iunge,
Valeat equorū tenacia infrenari minis.*

The first of these verses is either a short trochaic line or the end of a longer iambic or trochaic verse ; the second is composed of three bacchii ; the third is apparently cretic, if we may suppose the two last syllables of *tenacia* slurred into one, or for *infrenari* read *frenari*. Another passage in Nonius from the *Lycurgus* of Naevius, which runs as follows : *nam ut ludere lactantis inter se uidimus praeferre annem creterris sumere aquam ex fonte*, and is given by M. Ribbeck as trochaic—

*Namque ludere ut lactantis inter se vidimus
Propter annem, aquam creterris sumere ex fonte*

more naturally divides into two bacchii with an anacrusis—
nam ut ludere

*Lac | tantis inter se uidimus praeferre annem
Cre | terris sumere aquam ex fonte;*

and the same metre is perhaps traceable in a fragment of the *Neoptolemus* of Attius, i. Ribb. Nonius gives it as follows : *quid si ex Graecia omne illum par nemo reperiri potest*, which M. Ribbeck reduces to iambic senarii—

*quid si ex Graecia
Omni illius par nemo reperiri potest ?*

but which is with less violence written—

*quid si ex Grae | cia
Omni illum par nemo reperiri potest ?*

where *illum* for *illorum* is an old conj. of Voss, and suits the passage grammatically as well as *illius*. It is no doubt an indication of the difficulty of settling such metrical points that a line which bears on its front so clear an impress as—

Quamquam annisque et aetate hoc corpus putret (Pac. 340)

was at first considered by M. Ribbeck to be a truncated senarius, and that Ritschl, who determined it to be bacchiac, as it surely must be, arranged it by the help of the newly revived *d* (*actated*) as possibly also a senarius.

This brings us to a further point of criticism. Ritschl's lately published pamphlet on the final *d* has had more than what we consider a desirable influence on the editor of the fragments. After all Ritschl's arguments we still look upon the introduction of this final *d*, whether abl. or acc., with distrust. It is worth while to examine this with some minuteness, and we therefore write out at length such of the lines in which this final *d* is reintroduced, as far as we have at present examined, in M. Ribbeck's volume.

Liv. 26. *Ego puerum interea auxillae subdam lactantem meae.*

Ribb. *interead* ; in his first edition he supposed a syllable lost at the beginning of the line ; metrically this is less harsh ; *interead* not only makes a singularly unrhythymical line, but is without any MS. support.

Pac. 39. *Qui se icit quam illum cumpse lapidem, qui ipsa icta est, petit.*

Sed for *se*, Ritschl : yet *se* is very often written for *sese* in the MSS. of Nonius, and so Voss here, and Ribb. in his first edition.

Pac. 150. *Sed ne incertat dictio : quam rem expedi.*

Med for *ne*, Bothe ; but *ne* is not certainly even *me*, much less *med* : and if it were, we cannot be sure that we have a complete senarius.

Pac. 225. *Quid tandem ! ubi ea est ! quod receptat ! exul incerta uagat.*

Quod receptast ? Ribb. accepting *quod*, on Ritschl's suggestion, for *quo* : yet even if *receptast*, the conj. of Bergk, is

right, confusions of *quo* and *quod* are too constant to make any argument in defence of a final *d* derived from this passage of weight.

Pac. 237. *Qua super se intersectum esse Hippotem dixisti.*

Ribb. reads *sed*, and inserts *tu* before *esse*, inverting the position of *Hippotem* and *dixisti*. Little as we can approve of L. Müller's—

Qua super se intersectum esse dixisti Hippotem,

we approve as little of M. Ribbeck's *sed*. The line seems to be, as M. Ribbeck himself thought in his first edition, a cretic tetrameter, reading *dixti Hippotem*.

Pac. 248. *Pariter te esse erga illum video ut illum te* (ted, Ribb.) *erga* *sieo.*

315. *Postquam defessus perrogitando (-dod, Ribb.) aduenas.*

These two cases are to some extent on a level; the insertion of the final *d* is an easy, even a natural, expedient; very probably it was so written by Pacuvius: at any rate, *te erga* is impossible, even if *perrogitando* is allowed to stand as a hiatus. Yet other hypotheses are also possible, e.g. *te erga rescio*, *perrogitando'st*, or even as Umpfenbach and Bücheler: at any rate no one can say that these instances, and they are the strongest we have met with, prove the final *d* in the Latin Tragics. Equally disputable are other archaisms introduced without necessity, e.g. *quamde* in Att. 267—

Melius pigrasse quam properasse est nefas;

where *quam* is perhaps a corruption of *quando* or *quoniam*; *Iumpis*, Pac. 244, for the MS. *lymphis*: not that such forms may not be orthographically correct for the time of Pacuvius; but that M. Ribbeck's work ought to speak authoritatively, and authority in such cases is incompatible with anything like considerable deviation from the MSS. On the same principle M. Ribbeck, we should have thought, would have done better in retaining what look like remnants of ancient constructions. Thus in Pacuv. 330, *qui tibi in tutela est traditus* is quite archaic, like Cato's *ponere*, *condere*, &c. with *in* and an ablative; cf. Virgil's *Mandet humo solita*; and so in Att. 494—

Cum somno in segetem agrestis cornutos cident,

the simple abl. *somno* should have been kept, even if Catullus' *fallaci excita somno* is not enough to defend it. Again, why should *super satis agere*, Pac. 72, be altered into *semper satis a.*, when the combination *satis superque* recurs so often? or the substantival infinitive, *Concentare ac dissentire partem da(i) cursum aequiter*, "to dispute and disagree in part (?) that part should dispute and disagree" gives free course on both sides," be tortured into—

Concentare ac dissentire parti ac da cursum aequiter?

In the immediately following passage, Pac. 75, may not the MSS. reading *domitum imperium*, "the tyranny to which they are broken in," be right? and in Pac. 102—

Ossum inhumatum aestuosam auram,

does not *auram*, "vapour," suit the sense better than *aulam*, "a pot"? It may be said that in Pac. 114, *hymenaeum tremunt Aequales*, *aura resonit crepitu musico*, Euripides—

Ἀργεῖα τε νῦν
ὅμοιοις δημεροῖσιν αὐλεῖται δὲ πᾶν
μέλαθρον (J. T. 355),

points to *aula* (Scaliger) as a more than probable correction; still the four words of the former fragment ought to be judged by themselves; a principle, we think, scarcely estimated at its full value by M. Ribbeck. In Pac. 161-3—

quo tamen (?) quo iam me ipsa orbitas
Grandae uitiasque Pelei per penuriam
Stirpis subaxet,

where Ribb. reads *penuriam*, *subauxit*, it may be a question

whether *subauxit* = *subegerit* is not more in conformity with *per penuriam*: particularly as *subaugere* seems to have no existence. In Pac. 194—

Sed haec cluentur hospitum infidissimi,

where L. Müller proposes *heic=hi*; it seems more likely that *haec*, "these parts," is genuine.

In the well-known fragment from the *Iliona* (197-201), *sus-penso somno*, the reading of the best MSS. is in complete accordance with the language of other writers; sleep as a god is represented as hovering lightly over the sleeper, or transferred to a state of somnolence, the same word naturally passes into the idea of a light sleep, ready, so to speak, to take wing with the least disturbance. In 200, where the MSS. give *neu reliquias semiassi reis denudatis ossibus*, after Haupt's obviously true emendation, *sireis*, there can be little doubt that the whole line ran, as Bentley in part suggested—

Neu reliquias semiassi sireis denud. ossibus.

Another fragment of the same play—

Fac ut coepsti hanc operam mihi des perpetem, oculis traxerim,

is, with the change of *coepsti*, too good a verse to be altered: *oculis traxerim* would seem to mean, "let me drink it in with my eyes," like *haurire oculis*, &c.

Enn. Eum. 132—

Tacere opino esse optimum et pro viribus

Sapere atque fabulari tute noueris,

needs only an *ut* before *tute* to make the sense intelligible: "I consider it best to be silent, and to show such wisdom as one can, and only to speak in accordance with one's own knowledge."

Enn. 360—

*Animus aeger semper errat, neque pati neque perpeti
Potest,*

pati, not *poti*, must be right: "it can neither bear nor bear out."

These remarks are offered with profound deference to the eminent scholar whose contributions to Latin philology are so well known and so undeniable. In works like that before us the method may be said to be half the battle; and M. Ribbeck's editions of the Latin Tragic and Comic fragments were among the earliest specimens of that distinct arrangement of text, authorities, and critical apparatus, which has since become *de règle*. If we have ventured to question some of the conclusions of this new edition of the Tragic fragments, it is with a deep sense of the immense profit which every careful reader must derive from its learning and research, the felicitousness, nay certainty, of many of its emendations, in a word the impress of thoroughness and mastery which it displays throughout. In such men doubts mean so much that they are almost better than other people's certainties: that M. Ribbeck's second thoughts seem sometimes less probable than his first is a sure indication of the progress, to which no one has contributed so largely as himself, of the study in its multifarious departments of Latin philology.

R. ELLIS.

THE MANUFACTURE OF INSCRIPTIONS.

THE pretended discovery of "another Moabite stone," purporting to be set up by Moses in honour of himself, was published by Mr. Lumley in the *Times* one day, and contradicted by him the next. It was at once pointed out to him that the monument in question had already been published and philologically explained in the Quarterly Statement No. VI. of the Palestine Fund (1870), and *Zeitsch. d. d. morg. Gesellschaft*, 1871, p. 429, &c. But how are we to account for the differences between that simple Nabataean sepulchral inscription, which no doubt has not been copied with perfect accuracy, and the copy brought home by Mr. Lumley, but deciphered in utter contempt of philological

principles? It is obvious that only one stone with such an inscription can be in existence; and not less so, that if it was found in Umm-er-resas (and this is quite certain), the same inscription cannot have come to light in Medeba, a place which is certainly a good distance off. But there is another point equally certain, viz. the original identity of the characters of both the inscriptions. We only find some slight alterations in the form, and the mode of connecting and separating single characters. We also find the characters distributed in six lines in the new copy, whereas the genuine monument presents only four lines. A copy revised in accordance with the original one of Bechnam has only a few indistinct marks on a fifth line. But when Shapira's explanation of the stone is exploded, we naturally ask, whence comes the stone seen by Mr. Lumley at Shapira's house, 36 inches by 18, close granite, with a six lines' inscription? Clearly there is a monument in existence, manufactured probably by Shapira as an article of trade. A clever fraud for Jerusalem, but clumsy enough for any one who knows inscriptions! There is no misunderstanding here, as some might be inclined to think, for this is not the only suspicious inscription which has passed through the hands of Shapira. When M. Ganneau lately discovered a stele with a Greek inscription, forbidding non-Israelites to enter the inner court of the temple, and thus harmonizing beautifully with Josephus, Shapira soon afterwards produced a similar though smaller stone of the same purport, which was asserted to have been found on the same spot. He refused however to allow a "squeeze" to be taken on account of pending negotiations for its sale. A third stone in the possession of the same man is much more suspicious. The characters are said to agree with those of the stone of Mesha—and of course it is quite possible that other stones of the kind exist—but we are told that, according to Shapira, the Beduin, who is said to have brought the stone, refused to mention the place of its discovery. The monument, which is 2½ feet long, 1½ foot broad, and 8 inches thick, contains four lines with 86 letters. The first three lines are said to contain the 117th Psalm. As if psalms were ever engraved on stone! Our own thoroughly trustworthy correspondent writes: "I have already had people in Jerusalem pointed out to me who know about the manufacture of this stone. The characters have been well scratched in; but the stone has lain in a kind of lye, so as to get an antique appearance." Lately, too, I received two more "squeezes" of newly discovered Nabataean inscriptions. On examination, the one (you can see traces of the stone on it!) which passed through Shapira's hands stands in the same relation to the genuine inscription as his copy from Medeba to the genuine inscription of Umm-er-resas.

These facts seem to establish the existence of a flourishing manufactory of inscriptions in Jerusalem. Whether Shapira is the only partner in the concern or not is uncertain; but we feel bound to address a warning to scholars, and particularly to travellers in Palestine. Mr. Lumley is not the only person who has been deluded by Shapira, for a letter from Jerusalem in the *Athenaeum* for March 9 refers apparently to several of his forgeries as "very interesting and valuable inscriptions." Being personally acquainted with Shapira, we can state that he embraced Christianity from purely sordid motives. His character is just suited for a forger of inscriptions, as also his half-scholarship and his Jewish-German. The want of tact exhibited in various quarters in the tragic history of the Moabite stone begins to bear fruit. Beduins go in quest of inscriptions; then pashas extort them from them out of avarice, and play the part of harem-guardians of Semitic monuments; and the last result is now before us—the convenient though clumsy system of forgery.

ALBERT SOCIN.

Intelligence.

The well-known traveller Captain Burton feels called upon to correct some omissions and misstatements in the current accounts of the Moabite stone. In the *Athenaeum*, April 13, he gives a *résumé* of the palaeographical, linguistic, and historical peculiarities of the inscription, and flings an undeserved taunt at the scanty band of English scholars. He boldly asserts that "short vowel-points appear in parts of the inscription," and that, among other "shades of meaning" (!) there is a dual termination *-im*, and a plural *an*; refers Isa. xiv. and xv., "the so-called Isaiahanic writings," to the reigns of Uzziah, Ahaz, and Hezekiah; and contemptuously dismisses the historically important narrative in 2 Kings iii. His second paper (*Athenaeum*, April 20) opens with a list of articles, &c., on the inscription, which, except its

incomplete supplement, is borrowed without acknowledgment from Dr. Wright. The author then examines one by one the statements of Dr. Petermann in the German Oriental *Zeitschrift* for 1870 with a fullness and authority which would carry conviction were it not for his undisguised anti-German bias. Both articles are full of misprints. We have to thank the author for the information that M. Ganneau is quite willing to part with the stone, but that complications have arisen with the Comte de Vogüé.

A new work, by Dr. Richard Volkmann, on the rhetorical systems of the Greeks and Romans (Berlin: Ebeling and Plahn), contains an exhaustive collection of the material furnished by the Greek and Roman rhetoricians, Aristotle, Cornificius, Cicero, and Quintilian, also the grammarians and scholiasts, their precepts being illustrated by numerous examples from the Attic orators and Cicero. The work endeavours to show that the rhetoric of the ancients is not an arbitrary *olla podrida* of absurd and pedantic rules, but a thoughtful and refined structure of great perspicuity, and which may be of importance even to our own time. Another publication of the same firm is an essay by the younger Kinkel, *On Euripides' Relation to Art*.

New Publications.

- AHLWARDT, W. Bemerkungen üb. die Aechtheit der alten Arabischen Gedichte, mit besonderer Beziehung auf die sechs Dichter, nebst Beiträgen zum richtigen Verständniss Ennābīga's und 'Alqama's. Greifswald : Bamberg.
- BELLOGUET, Roget DE. Ethnogenie gauloise: Mémoires critiques sur l'origine et la parenté des Cimmériens, des Cimbres, des Ombres, des Belges, des Ligures et des anciens Celtes. 1^{re} partie : Glossaire gauloise. Paris : Maisonneuve.
- BERGMANN, F. W. Sprachliche Studien. (3. Serie.) Leipzig : Brockhaus.
- BERTRAM. Ilmatar. Comedia Turanica. Esthnisch u. Deutsch. Dorpat : Gläser.
- BEUNANS MERIASEK. The Life of St. Meriasek. A Cornish Drama, with translation and notes, by Whitely Stokes. Trübner.
- BRUGSCH, H. Grammaire hiéroglyphique, contenant les principes généraux de la langue et de l'écriture sacrées des anciens Egyptiens.
- BRUGSCH, H. Index des Hiéroglyphes phonétiques, composé et appliqué à son Dictionnaire hiéroglyphique.
- CHI-KING ; ou, Livre des Verses. Traduit pour la première fois en français par G. Pauthier. (Bibl. orient.) Paris.
- DOOLITTLE, Justus. A Vocabulary and Handbook of the Chinese Language : romanised in the Mandarin Dialect. Vol. I. Trübner.
- DOWSON, J. A Grammar of the Urdu or Hindustani Language. Trübner.
- DÜNTZER, H. Homerische Abhandlungen. Leipzig : Hahn'sche Buchhandlung.
- EICHHOFF, F. G. Hymnes du Rigvédá imités en vers latin. Pp. 6. Paris : Maisonneuve.
- EUCKEN, R. Ueber die Bedeutung der aristotelischen Philosophie für die Gegenwart. Berlin : Weidmann'sche Buchhandlung.
- EUTROPIUS BREVIARIUM ab urbe condita. G. Hartel recogn. Berlin : Weidmann'sche Buchhandlung.
- FABER, A. De Minucio Felice Commentatio. Nordhausen : Haacke.
- HEIMSKRINGLA eda Sögur Noregs, herausgég. von Linder u. Haggson. Konunga Snorra Sturlasonar. III. Bd. Upsala : Lundquist.
- HERTZ, M. Die Verdienste des preussischen Königsparis um die Erforschung des classischen Bodens. Breslau : Barth.
- HOMER'S ILIADE erkl. v. J. W. Faesi. 2. Bd. 5. Aufl. Besorgt v. F. R. Franke. Berlin : Weidmann'sche Buchhandlung.
- LORENZ, O. F. Collationen d. Codex vetus Camerarii (B, Biblioth. Vatic. Cod. Palat. 1615) u. d. Ursinianus (D, Vatic. 3870) zur Aulaularia d. Plautus. Berlin : Calvary.
- MÜLLER, J. G. Die Semiten in ihrem Verhältniss zu Chamiten und Japhetiten. Gotha : Besser.
- RELIQUIAE DIALECTI CRETICAE. Pars I. Glossae Creticae cum commentario de universa Cretica Dialecti indole. Scriptis M. Kleemann. Halle : Lippert'sche Buchhandlung.
- RIGVÉDA ; ou, Livre des Hymnes. Traduit du Sanskrit par A. Langlois. (Bibliothèque orientale.) 2^{me} édition, revue, corrigée et augmentée d'une index analytique par Ph. Ed. Foucaux. Paris : Maisonneuve.
- SHARPE, S. The Rosetta Stone in Hieroglyphics and Greek, with Translations and an Explanation of the Hieroglyphical Characters, followed by an Appendix of Kings' Names. J. Russell Smith.
- STRAUMER, F. De Ciceronis quae fertur, oratione apud Cassium Dionem Commentatio. Chemnitz : Brunner.
- TERENTI Hauton. Timorumenos. Erkl. v. W. Wagner. Berlin : Ebeling u. Plahn.
- VALENTINELLI, J. Bibliotheca Manuscripta ad S. Marci Venetiarum. Codices MSS. Latini IV. Venezia : Tip. del Commercio.

THE ACADEMY.

"INTER SILVAS ACADEMI QUARRERE VERUM."

Vol. III.—No. 48.

Readers are reminded that the mention of New Books, Articles, &c., in our lists is intended as a guarantee of their importance. The Editor of THE ACADEMY cannot undertake to return communications which are not asked for. The next number will be published on Saturday, June 1, and Advertisements should be sent in by May 28.

General Literature.

A. Sainte-Beuve. *Souvenirs et Indiscrétions*. Paris : Michel Lévy Frères.

A. Sainte-Beuve. *Nouveaux Lundis*. Tome troisième.

THERE is something pitiful about these two scrappy volumes, a sort of impression of the gleaning of grapes when the vintage is done. Of course the deplorable circumstances make the temptation to book-making irresistible ; and even apart from the two fragments of autobiography which appear in both, the two volumes contain much, both in the way of remains and of anecdote, which was too good to be wasted, and the time has not come for a life of Sainte-Beuve in which such materials might have been used without suggesting the suspicion that they were being traded upon.

Sainte-Beuve was one of the writers who suppress their personality without escaping from it, and therefore we can neither comprehend their writings without a knowledge of their character nor reconstruct the character without needing any help beyond the writings. An adequate life is wanted, but perhaps it may be doubted whether the adequate life can ever be written. His secretary appeals to Sainte-Beuve's correspondents, but it will surprise few if the appeal produces nothing more interesting than an interchange of diplomatic civilities with a variety of celebrities, with all the expression of opinion coming at the beginning of the series, before the writer had forgotten to feel and learned how to criticise : and then these scanty memorials may tell us very nearly all there is to tell of a great writer, whose character was too guarded to be easily known, perhaps too jealous to be worth knowing. The fact is, he was too important not to be a valuable convert, and he may be said to have passed his life in tantalising those who desired to proselytize him ; he could never abandon his intellectual liberty, and he could never resist the fascination of tasting and trying to the uttermost what he never meant to buy. One result of this cruel curiosity is to be traced in the inconsistencies of his great work on *Port-Royal*. Through all the successive revisions, we can still discern what passages belong to the Lausanne lectures, when the subject was still fresh, when the writer was in the full enjoyment of the luxury of being almost persuaded. They stand out in a very marked contrast from the successive layers of erudition which Sainte-Beuve continued to accumulate with admirable diligence long after he had come to regard the ideas of Jansenism somewhat in the light of a squeezed orange. And in what Sainte-Beuve says of himself, and in what his last secretary says of him and does not say, we find the trace of the kind of isolation which is another and an inevitable result of such a career. A man who had been acquainted with all that was best in France had none nearer to him at last than an old college companion whom he had found again after almost losing sight of him for thirty years, and had to

VOL. III.—NO. 48.

apologize to an old friend of Béranger who had known Lisette for the improvised family whom he might meet at his table. After all allowance has been made for differences of manners, there is something depressing in the thought that such a man lived so long in the world without taking root in it, without subduing it, and without really rising above it. Still he was not subdued himself : he was free to the last and laborious to the last, and if he measured his ideal obligations more jealously than could have been wished, it is to be remembered that he acted scrupulously up to his own standard, and that unwearied kindness to individuals, an indefatigable activity in the relief of tangible distress are higher qualities than the capacity for fidelity to a school, or a coterie, or a cause. Material external success is a secondary consideration, but it came at last in a manner not inadequate to Sainte-Beuve's abilities and his heroic industry ; it is scarcely worth while to dwell upon a drawback which it is clear, from the two fragments of autobiography, he felt himself. An undiscerning public was ready to leap to the conclusion which ungenerous critics were ready to suggest, that he had been patronised more or less by every one of those whom he had met, and from whom he had parted, whose reputation had been more rapid, perhaps more brilliant, than his own, without being really higher and without being so enduring. His highest success was of course in criticism, and the public were ready again to exaggerate the extent to which he had not succeeded in the line of creative literature. From this point of view, it is interesting to know that five large editions of *La Volupté*, "toutes réelles," were actually sold ; and that the copyright of the first edition of *Joseph Delorme*, the first work of an unknown writer, was judged worth 600 francs. Perhaps the most interesting biographical matter after the two fragments of autobiography are some letters to the college friend whom Sainte-Beuve found again in the autumn of his days ; they date from the early days of Romanticism, and it is curious to see the essential manliness and reasonableness of the writer breaking through the morbid fervour of the school. He must have smiled, and perhaps his correspondent would have smiled too, if they ever re-read a serious exhortation to a man who had, very sensibly, accepted an appointment in a country *Lycée*, to resign himself to his tragical fate, to submit to have had no youth, and no past, and no future. Some light is thrown on two contested passages in Sainte-Beuve's later career : the famous Good Friday dinner, and his migration from the ex-official *Moniteur* to the anti-dynastic *Temps*. It is shown, with almost superfluous completeness, that the first was in no sense a "demonstration ;" but the scandal must have been foreseen at least as a possibility, and no doubt the company thought it important not to be hampered by it. Sainte-Beuve was willing to humour a friend who disliked dining with thirteen at table ; it seems that he found it less easy to respect a feeling which he regarded as equally superstitious and more influential. The other matter is more perplexing. He had undoubtedly a strong claim upon the *Moniteur*, and the *Moniteur* was singularly indiscreet in showing that it still dragged its chain : opinions will always differ as to whether Sainte-Beuve was justified in the way in which he resented the officious pusillanimity of the editor who suppressed an article on some public lectures which offended the clerical party. It will be easy to deny that his conduct was in any degree disloyal, and hard to maintain that it was exactly generous or delicate.

The fact is, that he was one of heaven's Swiss like General Jomini, welcome and valuable in all camps, at home in none, and therefore exposed to mortifications which they always knew how to resent. There is a sort of fitness in the fact that his last great effort was a rehabilitation of the

famous tactician whose works had become the text-books of the army from which he had been driven; and the completeness with which the writer has succeeded in realising or in seeming to realise what constitutes the merit of a writer on tactics, what constitutes the special merit of Jomini, is one of the most astonishing *tours de force* in literature, especially when we remember that it was performed by a man of nearly seventy, suffering under a painful and incurable disease. On the other hand, we should have been glad to have had some discussion of Napoleon's dictum, that Jomini was a good writer and a bad officer. In general, it may be said that the finished little biographies which were Sainte-Beuve's speciality hardly seem to an English reader to deserve the name of "Studies;" they assume absolutely no knowledge on the part of the reader, though they always start from the fullest knowledge on the part of the writer, consequently the latter from first to last is always in the attitude of imparting information rather than in the attitude of answering questions. It is natural to compare them to Plutarch, and they hardly gain by the comparison: the scientific superiority of the Parisian to the Chaeronean is unquestionable, but so is the inferiority of subject; and on the literary side we have to choose between easy perfection of execution and breadth of treatment and an elevated tone. The article on Joachim du Bellay, one of the poets of the *Pleiad*, has much interest, both of a biographical and a literary kind. Sainte-Beuve claims for him the merit of having first formed a clear conception of the use to which all the French classicists from Racine to Chenier would put ancient literature. Malherbe was a hackneyed subject, and perhaps the paper on him was hardly worth reprinting: its principal merit is the insight with which the writer deplores the misfortune of French poetry in having no continuous tradition. It was originally written in the year of the Italian campaign, the year that Sainte-Beuve received the Grand Cross of the Legion of Honour—at a time when a disinterested critic might have found as many reasons for supporting the empire as Malherbe found for his devotion to Henri IV. and Richelieu. We have one of the first traces of the writer's disenchantment with imperialism in a wonderfully just and stinging sketch of true and spurious Caesars, dashed off as an introduction to an article on the *Vie de César*, which he was vainly pressed to review. As the article was never meant to be completed, the introduction is to be regarded as a *jeu d'esprit*; from this point of view it is hardly a defect that both classes are generalised from a single instance.

G. A. SIMCOX.

NORWEGIAN FAIRY-TALES.

Norwegian Popular Tales, told by P. Chr. Asbjörnsen. New Collection. [Norske Folke-Eventyr, fortalte af P. Chr. Asbjörnsen. Ny Samling.] Christiania: Dybwad, 1871.

Norwegian Huldré-Tales and Popular Legends, told by P. Chr. Asbjörnsen. Third Edition. [Norske Huldré-Eventyr og Folkesagn, fortalte af P. Chr. Asbjörnsen. Tredje Udgave.] Christiania: Steensballe, 1870.

ONE of the most competent judges of fairy literature, Andersen, began a biographical notice of Peter Christian Asbjörnsen, which he published some years ago in a Copenhagen periodical, with the following words:—

"In the lonely wood with its changeful play of sunbeam and shadow, where the silence is only broken by the patter of the distant waterfall, or the melancholy flute-notes of the thrush, or the ring of the axe as the trees are marked and felled to be carried down by the current to the landing-place; amongst the mountain dairies, where the hills echo to the tones of the reed-pipe, to the pet names of the cattle herded home, and to the joyous laughter of youth; in the block-house where the goodwife sits at the humming spin-wheel through the long winter

evenings, while the skilful husband and his sons carve the useful trifles which are eagerly purchased at distant markets; there, far away to the north, the fragrant flowers of fairy-tale still put forth their shoots. Yet do not think that it is given to every comer to receive a full and pure impression of their simple natural beauty, that, fresh and blooming as they are, he has but to stretch out a hand and seize them; far otherwise, this tender blossom is a mimosa which closes its petals at the least unfriendly touch. He who would pluck it must have a soul filled with love for nature and the life of the people, an eye which has been touched with the magic salve—no other can so much as see it!—That this is really so, any one may satisfy himself who compares all previous collections of Norwegian fairy-lore with that of Asbjörnsen and Moe, which made its first appearance in 1842, and has not long since been presented to us in a fourth edition. In this collection, and in none of the others, we find the fairy-tale as it still lives in the mouth of the people, and have therefore no difficulty in understanding how this work possesses a significance in Norway which has left profound traces on the best recent literature of that country."

The collection of fairy-tales of which Andersen speaks was received on its first appearance with universal applause, was translated into several languages (into English by Dasent), and made Asbjörnsen's name most favourably known. The present long expected continuation possesses all the merits of the first collection in an equal degree, and will be no less welcome, so that it will no doubt shortly be made accessible to the English public in a translation. Part of it has already been given to the world in the *Yuletreat*, "The Christmas-tree," published by Asbjörnsen in 1850–52 and 1860—23,000 copies of which were sold the first year. All these are now brought together with the addition of new tales, which, continuing the numbers of the old series, reach from 61 to 105. The great majority are identical in substance with the cycles of legendary fiction already met with in and out of Europe, though they present some novel features; but others again are entirely new, so that the whole collection, apart from the charm of the style, offers much promising material for scientific research.

The same may be said of the second of the collections under discussion, the *Huldré-Tales and Popular Legends*. And yet we have not to do here with fairy-tales proper, which are at home everywhere and nowhere, but with legends attached to definite localities, and derived from the special national mythology. Thus the Huldré-tales tell of the Huldré-folk, Norwegian mountain and wood elves, who, however, belong to the same class as the English and Scotch fairies, brownies, daoine shee, good neighbours, &c., so that the same legend is often told in Norway as in England or Scotland. Thus Sir Walter Scott relates in his well-known introduction to the ballad *The Young Tamplaine*, how "that a Gallovidian gentleman was one day taking the air near his own house, and was suddenly accosted by a little old man arrayed in green, who gave him to understand that he resided under his habitation, and that he had great reason to complain of a drain or common sewer, which emptied itself directly into his chamber of dais," &c. Quite similar is the complaint of a Norwegian Huldré-man against his neighbour, in the legend given by Asbjörnsen, p. 99, which is also to be met with in Denmark and Germany. So in Henderson's *Notes on the Folk-lore of the Northern Counties of England*, p. 154, there is a legend of the smith of Yarrowfoot, and (p. 158) another from Berwickshire, both of which bear a close resemblance to several passages in the Norwegian (and other) tales; Asbjörnsen, pp. 5, 193, 364. I pass over other instances of the same kind to call attention in general terms to the interest of the matter and the riveting charm of the narration in these *Popular Legends*, qualities especially remarkable in *Skarvene fra Udröst*, "The Cormorants from Udröst," "The Three Corbies," &c. The last of these is in the section *Til Havs*, "At Sea," under the title *Makrelldorging*, "Mackerel-dredging," as it is on a fishing expedition of this kind that the legend is supposed to be told

by an old fisherman. All the legends are introduced in a frame of similar character, which gives the author an opportunity of representing this or that neighbourhood, this or that class of the Norwegian people, in so clear and attractive and yet so natural and life-like a manner, that the reader feels as if he were actually amongst the woods and mountains of Norway with the *dramatis personae*, as Asbjörnsen's characters may, with literal propriety, be called, for they are really the actors of little dramas, which he sets before the reader with an art that looks like nature. As another Danish writer has remarked, no professional dramatist could show greater skill than he does in preparing the occasions on which his tales as it were introduce themselves. The poet nowhere appears, and yet the work is one of the most richly poetical with which we are acquainted; the descriptions are so varied and many-sided that new pictures are always being disclosed, and one wanders through the whole country hunting and fishing, up to the mountain homesteads, along the streams and through the woods, with companions in whom one seems to recognise old acquaintances, "whether they be huntsmen, or plank-carriers, or gipsies, or highland dairy-maids, or conjurers" (*signe-kiærringer*, literally "spell-women"); in a word, Norwegian nature and the Norwegian people are cast bodily by the poet into a single volume. That this is so appears from the repeated editions of his works, of which each one is more perfect in form than its predecessor. From year to year he penetrates further into the inmost life and nature of those classes of his countrymen who chiefly figure in his works, and from whom he derives the legends there communicated. His official position as ranger of the Norwegian forests is an important assistance to him in this way, as he has to traverse the country every year, visiting now this now that district, not omitting those most remote and inaccessible, so that he only tells and describes what he has seen and experienced in his own person. As long vacation tours, hunting and fishing excursions, and especially summer trips to Norway, are the order of the day in England, we can recommend no better guide and companions than those masterly descriptions of Asbjörnsen of the country and people of Norway; while those who are not able to see with their own eyes may trust instead to his; his glance is indefinitely more penetrating, and sees more justly, than that of all the authors of travels in Norway put together. It would therefore be a very thankworthy undertaking on the part of whoever will make this work accessible to the English public in a translation; the necessary permission would doubtless be readily conceded, and such a work might count upon the best reception and a wide popularity. It is seldom that so many excellent qualities are combined as here.

FELIX LIEBRECHT.

LITERARY NOTES.

M. Charles Aubertin, in the *Revue des deux Mondes* (May 1), derives from the correspondence of the Abbé Dubois some interesting details concerning the share of that Figaro-like diplomatist in the negotiations between France and England in 1717-18; from which it appears that, though Dubois was chiefly devoted to his own interest and that of the regent his master, the charge of venality brought against him by Saint-Simon was as inaccurate as many others of that writer's statements, and that his real talent was for administering bribes, though he never succeeded in prevailing on Lord Stanhope to accept the 600,000 livres which he was empowered to offer him at the Hague.

The attempts made during the siege of Paris to establish a system of signals with mirrors and reflected light appear to have

failed only because there was no spot in the city high enough for the rays of light not to be intercepted by the curve of the earth's outline before they had reached a serviceable distance. The recent experiments at Montpellier, directed by M. Le Verrier, seem to promise ultimate success, and an exceedingly simple apparatus is suggested for enabling two bodies of troops to discover each other's whereabouts, and so establish telegraphic communication.

"Novelties in Poetry and Criticism," in *Fraser* for May, is an attempt to hold an equal balance between the poets "generically known" as the "new school" and Mr. Tennyson, with whom the author also classes Mr. Browning, Sir Henry Taylor, George Eliot, and Mr. Lowell, as possessing more or less truly classical virtue. He points out that the "new school" is only held together by certain principles of art criticism, and that the poetical merits of Messrs. Rossetti, Morris, and Swinburne, though equally real, are widely different and independent of their common theories.

A. G. Stapleton contributes to *Macmillan* some very interesting reminiscences of Canning and Frere, and some of the squibs jointly composed by them in 1825 for the amusement of their private circle. In prose the two friends thought in such harmony that each would finish the sentence the other had begun; two unpublished pieces of satirical verse are equally characteristic of the difference between their styles, the playful airiness of Frere being perhaps as much more poetical as it is less telling than Canning's concise ironical eloquence.

Im Neuen Reich (April 12, 19) contains an interesting study, by Gustav Freytag, on Nicolaus von der Flüe, a monk of Unterwalden, who was commonly reported, at the end of the fifteenth century, to have lived for twenty years without food, and who was ultimately canonised, although a vision seen by him had been interpreted of a coming Antichrist, whom Luther subsequently identified with the pope. Nicolaus was a layman, quite ignorant, and left a wife and ten children in the world when he settled in his hermitage; to the visitors who pressed him to say if it was true that he lived without food, his only answer was, "Gott weiss!" and his great natural shrewdness seems to have been, all things considered, very little tainted with charlatanism; in 1481 his representations were successful in restoring a good understanding between the towns and country districts of Switzerland. Several contemporaries described the impressions made on them by this saint, and it is curious that the passages of ancient journals, &c. modernised by Herr Freytag resemble nothing so much as—Walter Scott, whose pictures of society in the latter part of the middle ages are a good deal more faithful than it has been fashionable of late to admit.

In the *Revue des deux Mondes* (April 15) M. Renan completes his life of Nogaret; and M. Louis Etienne reviews *Le Théâtre* from 1869 to 1872. M. Sardou is accused of always sacrificing the moral unity of his situation to an ingenious and effective plot. M. Octave Feuillet is the only modern dramatist who succeeds in making passion supply the element of fatality indispensable to tragical effect. M. Augier's dialogue is admirable, but he is deficient in want of feeling. M. Dumas' latest works would be excusable mistakes if they had appeared without prefaces, but if the theatre is the confessional of society, M. Dumas treats his penitents too much like those casuists who suggest more sins than would naturally occur to lay minds. M. Pailleron has poetic merit enough to succeed in the higher comedy. M. Godinet's ingenuity is undeniable even when most perverse. M. Meilhac only wants measure and correctness to attain a legitimate success; moreover, the public is getting tired of the artifices which have amused it for twenty years; it still goes to the theatre from habit, but would welcome more ambitious poetry and sterner morality than is offered it at present.

H. Oesterley writes to the *Allgemeine Zeitung* to point out, what has not been noticed before, that the prose Latin versions of the old French poem *Dolopathos* are certainly derived from a metrical original, as was supposed, for that whole passages can be turned back into verse with very slight changes and transpositions. He is preparing a critical edition of the work.

M. Philippson, in *Im Neuen Reich* (April 26), writes on the "religious policy of Henry IV." to the effect that there was a great deal of policy and very little religion in his conduct, and that his tolerance was even more the result of scepticism than of calculation, but no fresh facts are adduced in support of this unfavourable view.

A collection of Danish tales of peasant life in Jütland has lately been published by "Thyregod" (? a *nom de plume*) called *Blandt Bænder*. Some of them have literary merit of a very high order, and they are all thoroughly genuine and national in character.

Klaus Groth's lectures on "Lessing and his Time," which we before announced (*Academy*, vol. iii. p. 64), were delivered in German at the Taylorian Institution at Oxford on the 22nd, 23rd, and 25th of April, to a small though attentive audience. As is inevitable in the present phase of professorial sentiment in Germany, the political side of Lessing was brought into especial prominence. It was Lessing who emancipated German literature from French influence, and directed attention to England and especially to Shakespeare.

Art and Archaeology.

Fairy-Tales. By Hans Christian Andersen. Illustrated by E. V. B. Sampson Low.

Illustrations to Faust. By Paul Konewka.

Falstaff und seine Gesellen. Von Paul Konewka. Strassburg.

THIS new book of E. V. B. displays the same faculty that charmed us in her *Story without an End* and *Dream Book*, yet for some reason or other it is not quite so satisfactory as either. The peculiar ability of the artist seems hardly sympathetic with Andersen's *naïveté* and northern homeliness. Something more quaint and simple, and above all more individual in style, than these elaborate designs would have been better suited to express the pathos of the "Ugly Duckling" or the "Little Mermaid." As it is, the massive background of cypress-trees and southern hills, the Florentine young men from Pinturicchio or Gozzoli, which illustrate the last scene of the "Wild Swans," or, again, the Albanesque water-babies in the "Little Mermaid," touch a wrong chord. The wicked princess in the "Fellow Travellers," arrayed in poisonous greens and yellows, with black hair and sallow beauty, is more akin to the spirit of Andersen; while the two pictures of the water and the air—carp and swallow life, studied each in its own element—which accompany the tale of Thumbkinetta, would, we feel sure, gratify the author's soul. Through all these pictures the special talent of E. V. B.—great delicacy of taste, sensibility to varied forms of beauty, sympathy with styles as remote and different as possible from one another—can be traced. Her instinct for what is graceful in decoration appears on the frontispiece in the wreath of swans' necks and heads, marvellously intertwined. Her power of expressing religious mysticism is seen in the "Angel of the Garden of Paradise"; the weirdness of her fancy, in the portrait of the Wicked Princess. These are all characteristics of the *Dream Book*; but we repeat that in that publication they both were more in place, and had a freer scope. A Book of Dreams may well contain many moods of shifting insight into the beauty and mystery of the world. The illustration of so peculiar an author as Andersen demands more unity of style in the artist. Another remark too may be made—that the minute and delicate workmanship of E. V. B. suffers grievously from the crude daubing of the colourist. This is most noticeable in the first illustration to the "Wild Swans" at p. 8. When we compare this with the fine touches reproduced by photography in the *Dream Book*, and far more with the delicate original from which the chromolithographs are copied, and which were lately on view

in the Dudley Gallery, we are justly indignant. The new translation of these eight stories of Andersen is excellent in freshness and simplicity.

Turning to the work of the late Mr. Konewka, we pass at once from the region of strong colours, carefully constructed pictures, and multifarious moods, to the eloquent monotony of shadow-land. This artist lived in a curious world—a world of *silhouettes*, black outlines moving on a white background, expressing nothing by the eye, depending on no accessories for effect, but owing their life and meaning to pure attitude and action, and the outline of features in profile. The necessities of Mr. Konewka's chosen style have forced him to study all the expressiveness of dumb-show; the result is that few artists better understand how to tell a story or to indicate a character by the raising of a hand, the curve of a back, the peculiarities of curls in hair, &c. As may be readily understood, this art of indirect indications lends itself better to slight or humorous subjects than to what is profound or tragic. On the whole, therefore, we prefer Mr. Konewka's children's books and *Falstaff* to his *Faust*. Yet it must be admitted that the mood of passionate despondency expressed by Faust's exclamation, "Entbehren sollst du, sollst entbehren," is adequately rendered by mere attitude in the *silhouette*, that the distinction between Margaret innocent and happy, and Margaret passionate or mad, is also made quite clear by little alterations in the tension of the limbs and the arrangement of the dress and hair. Perhaps the great value of these *silhouettes* is to bring home vividly to our minds the pregnancy of meaning which the slightest movement of the body can convey. A whole new science of physiognomy in attitude seems to be revealed. Mr. Konewka's children are particularly charming. His little boys have a quite peculiar grace. His pifferari dance and caper in the most attractive manner. But it is in *Falstaff* and the whole of his humorous circle, Poins, Pistol, Peto, Slender, Shallow, Bardolph, and the Merry Wives, that he has shown the greatest wealth of fancy. To some extent, both in *Faust* and in *Falstaff*, he has learned from Retzsch; but in his own province of expressive attitude and dumb show he stands unrivalled among artists.

J. A. SYMONDS.

THE EXHIBITION OF THE ROYAL ACADEMY OF ARTS.

IT cannot but be acknowledged that portraits constitute as usual the principal feature, if not the principal interest, of this year's exhibition of the Royal Academy of Arts. Millais leads off with his splendid *tour de force*, "Hearts are Trumps; Portraits of Elizabeth, Diana, and Mary, daughters of Walter Armstrong, Esq." Then come his portraits of Sir James Paget, of the Marquis of Westminster, and of Master Liddell, son of Charles Liddell, Esq.—each in its way as good as can be. Never were the splendid physical endowments of this painter more manifest. As a painter of pure sense impressions he stands unrivalled. There can be nothing more startlingly real than the effect produced on the spectator who enters Gallery 3 by the figures of the girls playing cards, who regard him from the other end of the room. They are more real, more alive, than the living men and women who gaze on them. This powerful illusion is greatly enhanced by the scale of colour selected for rendering the subject. We find the keynote in the white azaleas of the upper left-hand corner, and, starting thence, the whole is set before us with complete unity of tone, in unmistakable, unmysterious daylight. Given the keynote, which is of course absolutely in the discretion of the artist, everything is right. As regards the apparently reckless handling, we must bear in mind that the science of representation is a science of symbols, and that each man has to adapt or invent symbols fitted to express the class of facts which he has intended to represent. In Mr. Millais' case the symbols which he employs are so admirably calculated to render the matter which he intends to render that we cannot

quarrel with them, though we may feel that they partake more of the nature of sleight of hand than of true workmanship. In his landscapes, as in his portraits of the surgeon, the marquis, and the boy, we may be sure that we have all that Mr. Millais saw of each scene, or of each creature, expressed in symbols fully adequate to the purpose. As a painter Mr. Whistler cannot compete with the splendid realism of Millais. But Mr. Whistler takes a foremost place in virtue of the intellectual power which he has shown in his forcible "Arrangement in Grey and Black ; Portrait of the Painter's Mother." The treatment of the subject is stiff, and harsh even to painfulness. At first sight in its voluntary renunciation of any attempt to rouse pleasurable sensations by line, or form, or colour, it brings up a vision of the typical Huguenot interior—protestantism in a Catholic country. Then, the longer we dwell on it, the more cruelly vivid becomes the presentation to us of life with its sources of joy sealed or exhausted. Mr. Millais, as we have noticed above, starts directly from his sense impressions unmodified by any mental operation ; Mr. Whistler starts from a precisely opposite point of view. The attitude of mind in his sitter being conceived, he has worked it out, selecting the key of colour and the lines of composition so as to enforce, as it were, rather the mental attitude than the material facts. In Mr. Watts we have an artist who is without the physical force of Millais, and (looking at Mr. Whistler's work of this year) without the intellectual vigour of Whistler. But Mr. Watts has a vein of poetic sensibility, and a refined taste, which make his work always interesting however unequal. His portraits of Mr. Calderon and Mr. Dunlop must rank amongst his best efforts. Both are fine in colour, and distinguished by the characteristic intention with which minor facts in each face are ignored or suppressed, the chief effort being concentrated in emphasizing the most essential lines only. By this method, when it reaches full success, we get, not so much the individual, but the type of which the individual is a variation ; the root of the word ; a simpler and at the same time a more condensed and intensified form of the man we know. Amongst the vigorous realistic painters of whom Mr. Millais must be reckoned the chief, Mr. Orchardson takes high rank with his unaffected and lifelike "Portrait of a Lady." It is a satisfactory piece of substantial work characterized by an air of healthy reality. The red gown has been successfully encountered, the figure stands well, and looks out of doors, which is saying a great deal. Gallait's "Mlle. A. B." is the work of a powerful and highly trained painter. The little child figure is alive with natural child piquancy.

When we leave the portraits, perhaps the marking picture of the exhibition is Mr. Walker's "Harbour of Refuge." It challenges attention even in the trying neighbourhood of Millais' dashing work. There may be in these galleries pictures more harmoniously complete in themselves as, for instance, Mr. Leighton's lovely poem, "Summer Moon," but there is no picture more considerable in real content. Mr. Walker gives us material enough to furnish out a lifetime of subjects to the average painter. Every figure in the group of old men is a separate study of character read with insight. The attitude of the careless servant who supports the old woman is admirably expressive, but her face—why has Mr. Walker suffered us to look straight into those eyeless sockets ? The tone, too, is unsatisfactory, the atmosphere is oppressive, the air seems choked with brickdust. Yet, though there is something of relative failure, there is much of positive achievement, and we have cause to be grateful in the presence of so original an artist, who seizes out of the daily life of his people the elements of dignity and pathos. In Mr. W. Richmond we have not, indeed, an original artist, but an artist of considerable ability, and of natural good taste refined by constant study of the best models. His "Lament of Ariadne" is a striking performance. The individual study which has evidently gone to the rendering and the masterly treatment of the drapery go far to make us forget the first predominant impression, viz. that we hear "The Lament of Ariadne" by Mr. Richmond in the style of Mr. Leighton. Of Mr. Leighton's contributions we have before spoken (see *Academy*, No. 46, vol. iii. p. 148), and need only add that they fully preserve, in the disturbing glare and contrasts of a public exhibition, their own air of harmony and distinction. The "condottiere" is refined and spirited, and nothing mars our pleasure in "Summer Moon" but a faint sense of discontent that the painter has not felt and made us feel more clearly the

structure of the beautiful limbs before us. Mr. Poynter's "Andromeda" is disappointing. It is to be regretted that such an amazing quantity of good work would have been put into such a falling-to-pieces composition. It suggests a design originally intended to decorate some allotted architectural spaces. In the centre the monster, to right the clever-looking little Perseus, to left the chained woman whose lower proportions are of inordinate length, to right again, and again to left, two little pieces of landscape. The moment of action also is unluckily selected ; we cannot stop with ease in the middle of the thrust which is to free Andromeda. But still there remains for us so great cause for satisfaction in the seriousness of intention, and in the amount of conscientious and artist-like work, as fairly vindicates the claim of "Andromeda" to be considered a painting of high importance. The grand processional air of Mr. Mason's band of harvesters has been a thing well found and finely felt. A great deal of the strange suggestiveness of this artist's works seems to arise from the very sense we have of their incompleteness. To the point desired, and sufficiently to place us in full relations with the motive, they are however finished, and that thoroughly ; there the hand stops. Much may be slight, but nothing is sketchy. "Fair, Quiet, and Sweet Rest," by Mr. Fildes, hardly justifies the considerable eulogiums which have been passed upon it. It is undoubtedly a work of promise, but at the same time of inadequate performance. With brilliant qualities, it shows grave defects. From end to end there is not a passage exactly true in relation to any other. The vigorous Scotch-looking handling gives full effect to drawing which is not free from the reproach of slovenliness. But the fresh, bright spring of youth which seems to flow into the picture attracts and prevents us from being quite out of humour with the evident signs of want of scholarly training. Again a similar want will be felt in Mr. Boughton's work. The landscape of the "Flight of the Birds" is fine, but the figures are unreal and commonplace. The "Coming of Winter" must rank far higher than either of its companions. Here there is no obvious shortcoming, and it is distinguished by delicate sentiment and much grace of colour. If we turn from these works, charming as in some respects they are, and look at M. Tissot's "Les Adieux," we recognise at once the work of a well endowed and thoroughly accomplished artist. The work of a man who knows what he wants to do, and how to do it, "Les Adieux" is, both in conception and presentation, as polished and high-bred as a poem of the best society should be. There is not a touch, not a fallen leaf, which does not lead up to, or help in some imperceptible way, the main beauty of the picture, viz. the exquisitely subtle expression of the girl's face. "Lavinia" shows Mr. Leslie, always an attractive painter of daintily bred damsels, at his very best. His "Elopement" has been unfortunately hung. The virile force which Legros has put into his "Pelerinage" breaks down through the river and reeds below, and crushes them up and drives them out of sight utterly. Of Mr. Poole's "Remorse" it is equally difficult to speak, or to be silent. Can we leave it there with its strange imperative air unchallenged ? Here is a man who has left us to our nineteenth-century realism, to our *vers de société*, and our verses of sentiment, and comes with a subject of which we know nothing set in a light which is a riddle to us, and embodied in shapes which are not human, and yet—here is some true artistic power.

In the Sculpture Galleries, "Maternal Love," by J. Dalou (terra-cotta, life-size), affords us a beautiful example of delicately just treatment of a modern subject. In statuary, as in painting, such subjects are for the most part invaded by dry dulness, or rush off into impertinent rococo. The mother and child are modelled with a simple directness of intention, guided by so fine a perception of beauty in life and delicate instinct for the just right mode of rendering it in art that they attain a quite classic charm. The same feeling may be observed in the little terra-cotta by the same statuary, "Le Jour des Rameaux," above which is Mr. Woolner's "In Memoriam," another example of good work and genuine artistic sentiment. And a very poetic conception will be found in Mr. Spencer-Stanhope's "Andromeda." The lower limbs are rather empty, but the torso, and indeed the whole upper portion of the figure displays modelling of a far higher order than one would expect from a mere acquaintance with Mr. Stanhope's work with the brush.

E. F. S. PATTISON.

ART NOTES.

The death of Mr. Richard Westmacott, R.A., the well-known sculptor, occurred at Kensington on April 19th. Mr. Westmacott was born in London in 1799. Amongst his most esteemed works are reckoned "Venus and Ascanius," "The Player on the Cymbals," and a "Nymph and Faun." He was also the author of a history of sculpture, and of an essay on the colouring of statues.

The reorganization of the art institutions of Berlin continues to occupy much of public attention. No. 17 of *Im Neuen Reich* contains an article in which the brightening prospects of the museums are discussed. The writer points out that the increased funds at their disposal will enable them to undertake much which has hitherto been out of the question. He strongly urges the formation of a museum of casts from all the most distinguished works in foreign galleries, and invites the government to earn the thanks of the scientific world by employing the growing navy on voyages of archaeological investigation and discovery.

The April number of the *Preussische Jahrbücher* contains an article bearing Conze's signature which carefully estimates the relative merits as catalogues of the late Dr. Carl Friederichs' *Berlins antike Bildwerke* and Bötticher's *Königliche Museen*. The writer considers that Friederichs' book, although defaced by certain much to be regretted blemishes, is a model of genuine popular treatment, and offers as much of interest to the laity as to the learned. Bötticher's catalogue, on the one hand, wants in comprehensiveness, and, in spite of the dragging in of all possible *minutiae*, is not sufficiently worked out to be of service to the learned, and, on the other hand, takes in too much for the simple public, and is often so abstruse as to be incomprehensible.

M. Léon Heuzey, professor of archaeology at the École des Beaux-Arts, has just brought his course of lectures to a close by two experimental lessons on Greek costume, to which he invited members of the Academy of Fine Arts, art students, and critics. A patient study of the works of Greek antiquity has convinced M. Léon Heuzey that the costume of the men and women of ancient Greece was composed simply of squares of stuffs varying in dimension. With squares of various stuffs M. Heuzey reproduced on the living model all the diverse and often complicated arrangements of drapery which are to be found on the statues, bas reliefs, and vase paintings of ancient Greece. Last year the professor terminated his course by similar experiments illustrating Assyrian and Egyptian costume. Next year he intends to take as his subject Roman archaeology and the more complicated costume of the Roman people.

M. Jules Canonge bequeathed to the Louvre in 1870 two valuable drawings in red chalk by Raphael, representing one Psyche, the other Jupiter giving a kiss to Love. These two drawings are now publicly exhibited in the Salle Louis XIV of the Musée des Dessins. All the sculptures, vases, and bronzes from the châteaux of the Tuilleries, Meudon, and St.-Cloud, are at present brought together in the gallery of the Daru Pavilion.

MM. Édouard Dubufe and Mazerolles are about to open in Paris a studio for pupils.

The April number of the *Zeitschrift für bildende Kunst* contains a very excellent etching, by W. Unger, of "Die Lautenspielerin," after Terborch. The original is one of the "Meisterwerke der Kasseler Gallerie."—Wilhelm Schmidt, of Munich, contributes some original researches on Jean Baptist van der Meiren, commonly known as van der Meer.—B. Stark draws the attention of the German public to the importance of the recent excavations on the site of the temple of Diana at Ephesus, in a valuable letter addressed to the editor, v. Lützow, and accompanied by a plan of the situation.

The Oesterreichische Museum in Vienna is making preparations for a permanent exhibition of the various modes of reproducing works of art. The special committee of organization

consists of Artaria, v. Eitelberger, v. Hauslab, Schestag, and Moritz Thausing. The scheme for the first exhibition includes five groups: (1) Engraving in wood and metal; (2) Etching; (3) Lithography; (4) Galvanoplastic impressions; (5) Daguerreotype, photography, photolithography, heliography, albertotypic, and nature-printing.

The art-union of Basle is engaged in forming an exhibition in honour of the opening of the newly erected Hall of Art. The exhibition is to include the paintings both of modern and ancient masters, and will commence on May 26. It is said that the schools of Munich and Düsseldorf will be in great force, although Swiss artists will of course occupy the first rank. The Netherlands are to furnish the chief contingent of the works of old masters, but both the Italian and French schools will be well represented.

The sale of the works of art belonging to M. Henri Rochefort took place on April 17. With the exception of a Meye, "Plage de Scheveningen," which was sold for the rather high price of 1550 frs., and a van Goyen, which went for 780 frs., all the paintings were of a very middling order.—A large and valuable collection of Limoges enamels was disposed of by M. Pillet on April 12; the most remarkable were—Penicault (*le vieux*): a fine triptych, the centre compartment representing Christ on the Cross; the left wing, Christ bearing the Cross; the right wing, the Descent from the Cross; each plaque 26 c. in height, the centre 24 c. in width, and the two sides 10 c.; 3500 fr. Pape (N.): a very fine plaque, which had formed a portion of a triptych representing figures in a landscape looking towards the left, and appearing to listen to some one preaching; 32 c. high, 17½ c. wide; 2500 fr.—The paintings left by M. Zamacois came to the hammer on April 15. "L'Heure du Rendez-vous" went for 6000 fr.; "Un Confessional," 6100 fr. These were the highest prices reached by the works of the artist himself. His collection, which was sold at the same time, contained a fine painting by Madrazzo, "Jeune Femme jouant avec un Singe," and several examples of Fortuny—a painter whose works are rarely seen in auction rooms.—On the same day took place the sale of the collection of M. L. M., the principal event of which was the active competition for a picture by Brascassat, "Taureau attaqué par un Chien," which was knocked down for 10,550 fr.—We find that the Berlin Museum is not the lucky purchaser of the du Cerceau work which came to the hammer at the sale of M. Vaudoyer's effects. The *Chronique des Arts* for April 24 corrects this statement, which we copied from a previous number. The work of du Cerceau was acquired by M. Edmond de Rothschild.—The last days of the sale of the Gillott collection, the 4th and 5th May, fully equalled in excitement and interest those which preceded them. Several fine examples of Turner went for very high prices; the "Ehrenbreitstein" for 2650 guineas, "Bamborough Castle" for 3150 guineas. Drawings by Hunt brought prices varying from 200 to 500 guineas. The large Rubens fetched only 1200 guineas.

New Publications.

- ALLEN, F. von. Aus Tischbein's Leben u. Briefwechsel. Leipzig: Seemann.
- BERTRAM, Dr. Neue baltische Skizzen. Helsingfors: Wasenius. (Leipzig: Voss.)
- ETHÉ, Hermann. Essays und Studien. (Literary and Oriental.) Berlin: Nicolai.
- FROEHNER, W. Les Musées de France, recueil de monuments antiques. Liv. 1 et 2. Fol. planches. Paris: Rothschild.
- GOETHE's Briefe an Eichstädt. Mit Erläutrungen. hrsg. von W. Frhrn. v. Biedermann. Berlin: Hempel.
- HEMARDINQUER. La Cyropédie, essai sur les idées morales et politiques de Xénophon. Paris: Thorin.
- HILDEBOLD VON SCHWANGAU, Die Minnelieder von, zum ersten male übersetzt u. mit begleitendem Texte herausgegeben von Joh. Schrott.
- INSTITUTO di Corrispondenza Archeologica, Monumenti, Annali, Bollettino dell. (Published by Archaeological Institute of Bonn.) Berlin: Asher.
- SCHNORR VON CAROLSFELD, J. Zur Geschichte des deutschen Meistersangens. Notizen und Literaturproben aus den Dresdner Handschriften des Hans Sachs und anderer Meistersänger. Berlin: Lobeck.

Theology.

TO THE EDITOR OF THE ACADEMY.

SIR.—It is always dangerous to publish opinions upon part of a great question without also laying down, explicitly as well as implicitly, the wider principles which should cover the question as a whole; and I see by your note in the current number of the *Academy* that I have not escaped this danger.

I have promised, if possible, to carry on my enquiry as to the Fourth Gospel also to the Synoptics; and, till this is done, I must venture to think that some of your objections to my argument are a little premature. I am quite ready to admit the "antecedent probability" of a legendary element finding its way into the Evangelical history. But "antecedent probability" will not carry us far. We ask to what extent legendary matter has thus entered in. And the only way in which the answer can be given is by determining the relation in which the writers stand to their history. This, I think, can be decided in the case of the Fourth Gospel by independent considerations; and if such considerations point to the Apostle St. John as the author of the Gospel, it appeared to me rather superfluous to argue the question of legend in connection with it further. The same conditions do not apply to the Synoptic Gospels; and it slightly misrepresents me to say that I deny the existence of legendary matter in these. On the contrary, I have rather asserted it (pp. 258, 267, 268). But I think there is strong evidence to show that such legendary accretion as seems to be there is still very near to the original facts. When I come to the Synoptic Gospels, I will state my reasons for this opinion more fully, but in the meantime I can hardly admit that the objection is relevant to my present argument.

Again, I think you push into a little too much prominence the particular argument from the "circumstantial precision" of the Gospel. I have only made use of this along with others, and it loses a great part of its force when separated from its context. The point of the sentence quoted lies in the conditional clause. I say that the relations of Judaism to nascent Christianity are depicted in a way in which they could not have been, had the author been born after the taking of Jerusalem—and I am not aware that this argument has ever been fairly met. Besides I maintain, and have endeavoured to establish step by step, that the circle of ideas within which the Gospel moves is entirely the Evangelical and Apostolic circle, not the Gnostic or any other.

I did not fancy that I had given any great prominence to Sir R. Hanson: at least as much, I should have thought, is given to Dr. Scholten and M. Renan, not to speak of authors like Meyer and Weizsäcker, with whom I more nearly agree. My reason for choosing Dr. Keim was simply because he seemed to hold the anti-Johannean hypothesis in its most tenable form and with its least substantial element sifted out of it. If any better representatives of this theory exist, I should be glad to know of them. The hypothesis of "mediate authorship" (pp. 301-4) may perhaps need more discussion, but I am convinced myself that it will not hold, and that the arguments are all there, and only need to be arrayed.

If it is true that "many of my arguments have too strong a likeness to the (present?) century," by all means let them be dismissed. I had made it my endeavour to exclude all that was not based on permanent conditions of human nature; and wherever I have failed to do this, I have missed my object. But care should be taken lest, in flying from one form of modernism, we fall into another. I am convinced that a good deal of German criticism (admirable, magnificent as that criticism is) is yet essentially modern, and not only modern, but German in the restricted sense. That is why I do not adopt quite so fully as you would wish me the method of "liberal"—i.e. practically of "liberal German"—criticism. I am prepared to defend my procedure in this respect, and I hope I shall be able to make it appear in time that the principles upon which I have worked are not taken up at hap-hazard, but hang systematically together.

W. SANDAY.

Great Waltham, Chelmsford, May 3.

[So far as our note is liable to misconception, we are, most happy to modify it in the sense of the above explanation. To take the points in order. First, German criticism has passed through several phases, and we questioned whether an English critic was justified in taking up the subject at such an advanced point. This doubt, however, was only thrown out incidentally. As for Sir R. Hanson, it is true that he is referred to, as far as we can remember, only twice by Mr. Sanday, but on both occasions in a pointed manner, and apparently as the most

noteworthy English writer. Secondly, we are quite aware that Mr. Sanday's argument from circumstantial precision hangs together with that from the doctrinal characteristics of the Gospel, but we thought, perhaps erroneously, that this was patent to the reader by one express mention of the complete analysis of the book. The quotation about Shakespeare tempted us by its inciseness. Our third remark was to the effect that the admission of the historical character of the Fourth Gospel involved a similar admission with regard to the other Gospels. This was no doubt liable to misconception: we should have said, "with regard to great part of the other Gospels." The relevance of the argument is an open question; we only asserted that it might be urged by an objector. Fourthly, Mr. Sanday is mistaken in supposing that "liberal" criticism is identical to us with German. Not so; criticism is essentially neither German nor English, but should seek to transcend mere local or temporary peculiarities. And we fear that Mr. Sanday's psychological point of view has not escaped the danger of onesidedness.]

Contents of the Journals.

Journal Asiatique, Jan.—Rapport sur une mission archéologique dans le Yémen; par M. J. Halévy.—Nouvelles et mélanges: *Phonetic Values*, and *History of Assurbanipal*, by G. Smith; par M. J. Oppert. [We regret the bitter tone of M. Oppert's criticisms, which points to some personal misunderstanding between himself and Mr. Smith. It would be absurd to ignore the eminent services of M. Oppert. We question however whether he himself always observes the rule of acknowledging the labours of his predecessors. Two or three of his facts are questionable. *Mat Mas* is not *maddar(u)*, "desert," but "the land of Mash" (Gen. x. 23). The *Iphtatael yuctatalisir* is paralleled by the *Istataphal yustetetir*; and the value *nas* assigned to the character *ta* is imaginary.]—Yarkand (Mr. Forsyth's mission); par J. M.—Lettre à M. Jules Mohl.

Götting. gel. Anzeigen, March 27.—Kohut on the Persian translation of the Pentateuch by Tavus; rev. by H. E., who finds much to censure in the execution of the work, and questions the authorship of Tavus (*Taus*, *tauš*).—April 24. Works on Libyan inscriptions by MM. Reboud, Faiderbe, and Judas; rev. by H. E., who expresses a hearty recognition of the services to linguistic science rendered by the French in Algeria; he adds a few words on Count Sierakowski's work on the Berber languages and tribes, which includes a grammar of the Schaūi by M. Torchon.

New Publications.

BROCKHAUS, Cl. Aurelius Prudentius Clemens in seiner Bedeutung für die Kirche seiner Zeit. Leipzig: Brockhaus.
MOESINGER, G. Supplementum Corporis Ignatiani. Innsbruck: Wagner.
REUSS, E. Bibliotheca Novi Testamenta Graeci. Strassburg.

Philosophy and Science.

Auerbach's Edition of Spinoza. [B. de Spinoza's *Sämmliche Werke*. Translated from the Latin, with a Life of Spinoza, by Berthold Auerbach. 2 vols. Cotta.]

Since the first edition of this work was published thirty years ago, 3000 copies have been sold—a fact on which the translator is not unreasonably disposed to congratulate his countrymen, as the number must have been made up outside the learned classes to whom the Latin text is accessible. The present edition is "corrected and enlarged;" the new matter in the life is chiefly derived from van Vloten, whose discovery of unpublished letters to and from Spinoza led to the identification of two anonymous correspondents with Dr. Schaller and a young Saxon noble von Tschirnhaus. These letters were translated in 1870 by Dr. Willis, *B. de Spinoza, Life, Correspondence, and Ethics*; and to English readers by far the most valuable part of the present work is that supplied by Professor Schaarschmidt, who translates the early work of Spinoza which he had edited in the original Dutch in 1869, and which was only otherwise accessible in an uncritical Latin translation by van Vloten, its discoverer. This *Korte Verhandeling van God, de Mensch en deszelfs Welstand* ("Short Treatise on God, Man, and Human Happiness") covers nearly exactly the same ground as the *Ethics*, and contains by implication all Spinoza's characteristic doctrines; but it is of peculiar interest to the student of his system as

showing which parts of this Spinoza accepted for their own sake, and which as necessary logical inferences from previous assumptions, for it is certainly one of the disadvantages of the mathematical mode of demonstration that a conscientious thinker is led by it to say sometimes more and sometimes less than he presumably thinks. The two points on which Spinoza's views seem to have undergone modification as well as development are the will, of which he is more anxious to deny the existence than the freedom, though this is perhaps rather a difference of language and arrangement than opinion (cf. *Eth.* ii. 49, cor.); and the natural world, which in chap. iv. he seems half inclined to speak of as "der Gottheit lebendiges Kleid," instead of, as in the *Ethics*, strictly identifying God and the whole sum of natural existences.

In his translation Auerbach has aimed, he tells us, at faithfulness and accuracy, and "dabei möglichst deutsch zu schreiben;" in the latter respect he may have been more successful than in the former, though we cannot think that his style would have lost by following the pointed terseness of the original more closely. He seems as a rule to give the general sense, which it is scarcely possible to mistake, with sufficient accuracy; but he does not aim at reproducing the exact value of each word in the text, and, what is worse, he allows himself to use different equivalents for the same word, and the same equivalent for different words. Thus *idea* is generally *Vorstellung*, but sometimes *Idee*; *imaginatio* is sometimes *Einbildungskraft*, sometimes *Phantasie*, and *imaginari* sometimes *sich in der Phantasie vorstellen*, sometimes *sich einbilden*, sometimes *darüber phantasiren*. It is thus left to the translator's discretion what precise shade of meaning a particular passage shall receive. *Vorstellung* and *Einbildungskraft* are German for idea and imagination, and it was for Herr Auerbach to explain, if necessary, how much of the ordinary literary connotation of the words his readers must dismiss from their minds in order to follow Spinoza's use of them. We had marked a few passages taken at hazard, in which we had to turn to the original for explanation of the translation: vol. i. p. 529, we find the precept, "Vergnügen nur so weit zu geniessen, als es zur Erhaltung der Gesundheit genügt." Spinoza could not have written this, and did write *Deliciis in tantum frui*, &c.; the *nur* is redundant, and almost reverses the meaning. Vol. ii. p. 430, is an instance of the same word set to do double duty; Herr Auerbach has, "so weiss ich nicht, wer ihm gesagt hat, dass wir . . . nur durch freien Beschluss des Geistes festen und beständigen Geistes sein können," Spinoza, of course, "ex libero *mentis* decreto fieri ut firmato et constanti simus *animo*;" and in the same letter the phrase, "qua in re satis, ne dicam, nimis confidenter perstat," might surely be better translated in a rich and flexible language than as we find it, "und hierbei bleibt er ziemlich, um nicht zu sagen, allzu vertrauensvoll stehen." Small blemishes and inaccuracies (*Machtvollkommenheit* for *sufficientia*, *das Verständniss* for *rò intelligere*, &c.) are rather numerous, and though it may be said that these are trifles, still it is scarcely worth while to translate an author like Spinoza unless he is to be naturalised amongst the classics of a language; and a good deal will have to be done to the work before us before it will dispense any serious amateur of Spinozism from the necessity of learning Latin. There is a real difficulty in vol. ii. p. 325; Spinoza is answering Blyenbergh's enquiry whether God was the cause of Adam's disobedience, and the obscure passage runs "non vero quatenus malum erat; nam malum, quod in eo erat, non erat aliud quam privationis status, quem propter illud opus Adamus amittere debebat." Willis translates quite at random, "not however, as it was evil, for the evil that was in it was nothing other than a state of privation into

which Adam must fall by reason of the act;" Auerbach not much better, "denn das Böse, das darin war, war nichts Anderes, als der Zustand der Beraubung, welchen Adam wegen jener That annehmen müsste." This is one of the letters which was not written in Latin, and perhaps Professor Schaarshmidt will be able to correct the common text by the original Dutch version; but meanwhile we had certainly better construe, "For the evil which was in it was nothing else than (the evil) of privation of the state which (state) on account of that deed Adam was to lose."

H. LAWRENNY.

The Morphology and Physiology of Plants. [Botanische Abhandlungen aus dem Gebiet der Morphologie und Physiologie. Herausgegeben von Dr. Johannes Hanstein, Prof. der Botanik an der Universität Bonn.] 1870-1871.

FOUR numbers of this important publication are now before us; each number, whether of smaller or larger dimensions, being devoted to a single subject with a separate title-page, so as to be complete in itself. The subjects already published are as follows:—1. The Development of the Embryo in Monocotyledons and Dicotyledons. 2. On the Structure and Development of Bacillariae (Diatomaceae). 3. On the History of the Growth and Morphology of the Roots of Phaeogams. 4. On the Development of the Embryo in the Genus *Selaginella*. It will at once be observed that the subjects are not such as promise much novelty, but it is of great importance that, after the various theories which have appeared from time to time, we should at last have some point on which we can firmly place the sole of our foot. It is much to be wished that botanical instructors, or the handbooks which are submitted to students, should not bewilder them with a multitude of theories, good sense in most cases being sufficient to indicate what is really the true one. It is proposed at present to confine our remarks to the two latter subjects with the intention at some future time of adverting to the two earlier numbers.

The paper on the development and morphology of roots is due to J. Reinke, but the observations were conducted under the guidance of the editor. The consideration of the root of Gymnogens did not come within the views of the author. The subject is of some importance as regards the prevalent notions of the functions of the spongelets or hood (Haube), as it is called in the memoir, the truth in all probability lying between extreme views on either side. That it is active at the first moment of development can scarcely be doubted, though the outer cells soon become effete and inactive. The young root is by the author divided into five parts: the pleroma, which, as the name implies, fills up the centre of the rootlet, and is homologous with pith; a layer of cells called pericambium, which lies between the pleroma and another set of cells, to which he gives the name of periblema, which may be regarded as the rudiments of bark; another layer of cells beyond this called the dermatogen, which generates the cuticle above and the spongelet below. The process is just the same in adventitious roots, which appear almost always to be developed in the neighbourhood of a spiral vessel. Slight modifications occur now and then, but the general structure is just what is described in the case of the primary and adventitious rootlets of the common sunflower. It is to be regretted that the anomalous primary rootlet of *Tropaeolum* did not come under notice, and it would have been very interesting to know precisely the relations of the coleorhize, which is quite distinct from the false coleorhize arising from the prolongation of the base of the cotyledons, to the included rootlet. The production of the four adventitious rootlets in *Impatiens* almost contemporaneous with the development of the primary rootlet is

very curious. The term endorhizal ought to be expunged as characteristic of Monocotyledons, as in the greater portion of the class the first root is as truly exorhizal as in any Dicotyledon.

The other memoir to which we advert at present is that on the development of the embryo in the genus *Selaginella*. It is not, however, confined merely to a portion of what had previously been so well done by Hofmeister, and it would perhaps be difficult to point out any important additional information which it affords; though some points, as the development and form of the spermatozoids and of the rootlets, are treated at greater length than could be expected in a mere general investigation like that of Hofmeister. The several stages, moreover, of the formation of the suspensor and embryo are carried out more continuously, and we have the fact put forward more prominently that the plumule and primary rootlet are horizontal, and not vertical, as in ferns. The occasional transformation of the aerial roots into leafy shoots is curious. As regards the development of the roots themselves there is merely a resemblance with that of Phaeogams in the earliest stage, and that only in certain plants. In Phaeogams the several parts enumerated above, pleroma, &c., are from the first distinctly separated, whereas in the vascular Cryptogams they are merely differentiated as well in the embryo as in the growing stem by corresponding divisions in the segments.

The lettering unfortunately in the former memoir is not always very clear, which makes it difficult to understand the figures, which is the more necessary as the terms used are not familiar.

M. J. BERKELEY.

Notes of Discoveries and Scientific Work.

Geography.

Central Asia.—The narrative of a most important journey in Central Asia, made in the summer of last year by A. P. Fedchenko, is given in *Petermann's Mittheilungen*, having been prepared from a collection of the traveller's letters published at Tashkend. Central Asia, especially the region surrounding the high valley of Eastern Turkestan, has long rivalled the North Polar area and the Nile basin of Africa as a centre of attraction for geographical explorations. The present journey forms the chief step in the steady advance which has been made from the Russian side. Fedchenko entered the diminished Khanate of Kokand from Kojend, in the Russian province of Turkestan, and at an audience granted by the Khan at the capital city he obtained a written permission to travel in the Khanate. From the city of Kokand the traveller first went southward by Ispara, on the way which leads through the mountains to the principality of Karategin; but the passes in this direction were closed to the Kokandians through a rebellion of the Kirghiz. Fedchenko describes the head of the Ispara valley as an extensive circus, on the southern side of which eight peaks rise to a height of 18,000 to 19,000 feet; between each of these a great glacier with side moraines sinks into the valley, descending to a level of about 10,000 feet above the sea. The pass to Karategin is over one of these glaciers. From this the route lay across the high spurs of the mountains which bound the Khanate, south-eastward to where a side valley of the Syr Daria, that of the Kurshab, a small tributary, leads up to the most important pass of the whole region, the Terek-Dawan, on the highway to Kashgar and Eastern Turkestan. The Terek pass is scattered over with great stones to such an extent that it can only be used for traffic in winter, when the snow has filled up the spaces between these. In summer the caravans take a more circuitous route by a side pass. The summit of the Terek, looking down towards Kashgar, appears to have been the extreme limit of the journey.

Southern Arabia.—The results of elaborate investigations of the geography of Southern Arabia, made during a long residence in the neighbourhood of Aden, by Freiherr von Maltzan, are published in the same journal. Von Maltzan obtained his knowledge for the most part by a regular system of examination of every traveller arriving by any of the routes which centre in Aden; and by comparing the accounts thus received with the descriptions given in the manuscript work of the Arabian geographer "El Hamdani," a copy of which he was fortunate enough to find in Aden. In this way he has been able to map out a region of the country stretching north- and eastward almost equal in extent to Bavaria. When studied along with the journeys of von

Wrede, Munzinger, and Miles, the map forms a most valuable addition to geography, by filling up a space which was hitherto a perfect blank.

The Yellowstone National Park.—This remarkable tract of country, to which attention was directed in the *Academy*, No. 46 (vol. iii. p. 151), has been described in considerable detail by Dr. F. V. Hayden in the parts of the *American Journal of Science* for the present year. The April number contains a map of the park and its surroundings, and the Report of the Committee on Public Lands, which serves to explain its many interesting features.

Ameland.—A company has been founded, and operations already commenced, for the purpose of throwing a double dam across the Wadden, which flows between Ameland and the mainland, and uniting this island with Friesland. The soil of Ameland, which affords very rich pasture, is fast being worn away by the sea. An interesting description of the island, and the great engineering undertaking that is to save it from destruction, is given in *Das Ausland*, 1872, No. 11.

Die Zeitschrift der Gesellschaft für Erdkunde zu Berlin, No. 36, contains a description, by Dr. Nachtigal, of Wara, the chief town of Wadaï, with a population of about 10,000. The paper contains a detailed account of the palace of the Sultan and the chief buildings, and is provided with plan of the town.

The correspondent of the *Times* in Rome, in a letter of the 8th inst., states that reports had reached Naples of an extraordinary ebullition of the sea near Stromboli.

Zoology.

On the Early Stages of an Ascidian.—In the year 1866, Kowalevsky published a remarkable series of observations on the embryology and early stages of several Ascidiens, in which a structure similar to, if not identical with, the type-characters of the Vertebrata was demonstrated. These observations were confirmed by Kupffer, who showed, in addition, that the nerve-mass actually penetrates the tail of the embryo to a considerable distance; but met with opposition from Dönnitz, in a paper which has hitherto been almost entirely ignored. Kowalevsky, while continuing this line of research in tracing the embryology of *Amphioxus*, believed he saw a very close resemblance between this lowest form of the class of Fishes and similar stages of the Ascidian; and other zoologists arrived at the conclusion that the connecting link between Vertebrates and Invertebrates had been discovered. In support of this view, additional and not unimportant evidence is furnished by Dr. E. S. Morse, in a paper "On the Early Stages of an Ascidian (*Cynthia pyriformis*)"—(Proc. Boston Soc. Nat. Hist. xiv.). In larvae just freed from the egg, he observed so distinct a segmentation of the axial chord that he was enabled to count the segments, forty in number, four of which extended into the body proper. The tail was surrounded by a fin, in which could be clearly distinguished numerous fine diverging rays, as in an embryo fish. The axial segments were nucleated, and enclosed in a continuous investing sheath, which disappeared at the caudal tip. The paper by Dönnitz alluded to above is entitled "On the so-called Chorda of Ascidian Larvae, and the Supposed Relationship of Invertebrate and Vertebrate Animals," and is published in the *Sitzungsberichte der naturforschenden Freunde zu Berlin*, 1870-71, as well as in the *Archiv für Anatomie und Physiologie* (pp. 761-764). Dr. Dönnitz, who made his observations on *Clavellina lepadiformis* at Naples, states that the central nervous mass, as described by Kowalevsky, is not found in the larval *Clavellinae*; that the string of cells, intermixed with vacuoles, in the axis of their tail, is only apparently similar to the vertebrate chorda, being, in fact, quite different from it; and that these cells are arranged concentrically, and not in bilateral order, nothing like a vertebra being formed. He thinks it even very doubtful if the adjoining cells can be regarded as muscle-cells.

Fossil Phascalomys.—Professor Owen has read before the Royal Society (Proc. Royal Soc. 1872, 131) another chapter of his *Fossil Mammals of Australia*, treating of the remains of species of Wombat similar in size to the known existing kinds. These researches are made on specimens obtained from the bone-caves of Wellington Valley, and the freshwater deposits of Queensland. Modifications of the lacrymal, maxillary, and palatal bones in the existing species of wombat were applied to the determination of the fossils, and the author was thereby enabled to distinguish, in addition to the *Phascalomys Mitchellii*, known since the year 1835, a second species, which he has named *Ph. Krefftii*, after its discoverer. Having likewise met with valuable distinctive characters in the mandible, he shows that *Ph. latifrons* is represented among the fossils from the Wellington Valley caves. Three other new species, *Ph. Thomsoni*, *Ph. platyrhinus*, and *Ph. parvus*, are also founded on mandibular remains from Queensland, the last species being markedly inferior in size to any of the known living wombats. Prof. Owen promises, in a continuation of this memoir, an account of the extinct species which exceeded in size the existing wombats.

Although several more or less complete treatises on and lists of the Birds of New Zealand have been published, they were rather of a

tentative and preliminary character; and the work before us (*A History of the Birds of New Zealand*, by W. L. Buller; London and New Zealand) is the first which gives a full account of this ornithic fauna, which, in zoological interest, is not excelled by any other country. The work comprises an introductory treatise on the ornithology of New Zealand; a diagnosis of each species, male, female, and young, with the synonymy and references to the more important part of the literature, followed by a detailed description, to which is added a full account of the life-history and habits of the bird. About one-half of the species, which amount to some 150, will be represented by coloured illustrations. The work will be issued in five parts, each containing not less than seven plates, and we understand that the author contemplates to conclude it with an account of the osteology of the more remarkable forms. There can be no doubt that Dr. Buller, well known in Europe by his preliminary ornithological publications, is eminently qualified to fulfil this task. His long residence in the colony and his official position have given him rare opportunities of making observations and collecting materials; and by a lengthened visit to England he derived the great advantages of studying typical examples, and of availing himself of that typographic and artistic skill in which this country excels. To judge by the first part just issued, Dr. Buller has succeeded in producing a work of real excellence. The text is clear, instructive, and not overloaded with unnecessary detail; while the illustrations are beautiful and life-like. The remaining parts are to be issued at very short intervals.

The sixteenth volume of the *Bulletin de l'Académie impériale des Sciences de St.-Pétersbourg*, 1871, contains some highly interesting papers:—1. L. von Schrenck, Report on Several Individuals of Mammuth said to have been recently found in Northern Siberia, from letters received from M. Gerh. von Maydell, with remarks on the way in which these bodies may have been preserved, their scarcity, &c. (pp. 147-173).—2. Alex. Brandt, Supplementary Remarks on Fossil Medusae (pp. 413-422).—3. J. F. Brandt, Report on the Progress of his Researches on Cetaceans inhabiting seas which covered Central Europe and Asia during the Tertiary epoch (pp. 563-566).

Berichte des naturwissenschaftlich-medizinischen Vereines in Innsbruck, i. 1871, contain only one zoological paper, which may be easily overlooked, as this journal is almost unknown in this country. It is a memoir by C. Heller, "Untersuchungen über die Crustaceen Tirols," No. 1 (pp. 67-96, with 2 plates). Of the descriptions of the various species, we notice particularly those of two new *Cyclops* and one new *Candona*.

The Linnean Society has issued the fourth and concluding part of the twenty-seventh volume of its *Transactions*. The following zoological papers are contained in this volume:—1. H. B. Brady, W. K. Parker, and T. R. Jones, A Monograph of the Genus *Polymorphina* (pp. 197-254, pls. 39-42).—2. A. Rattray, On the Anatomy, Physiology, and Distribution of the *Firoliidae* (pp. 255-276, pls. 43 and 44).—3. Sir J. Lubbock, Notes on the *Thysanura* (pp. 277-298, pls. 45 and 46).—4. E. L. Moss, On the Anatomy of the Genus *Appendicularia*, with the description of a new form (pp. 299-304, pl. 47).—5. St. G. Mivart, On the Vertebrate Skeleton (pp. 369-392, pl. 53).—6. O. P. Cambridge, Descriptions of some British Spiders new to Science; with a notice of others, of which some are now for the first time recorded as British species (pp. 393-404, pls. 54-57).—7. R. O. Cunningham, Notes on the Reptiles, Amphibia, Fishes, Mollusca, and Crustacea obtained during the voyage of H.M.S. *Nassau*, in the years 1866-69 (pp. 465-502, pls. 58 and 59).

The *Forshandlingar i Videnskabs-Selskabet i Christiania*, 1871, contain, besides several smaller notices of local interest, a long paper by Axel Boeck, "Crustacea amphipoda borealis et arctica," pp. 83-281, preliminary to a larger work which will be shortly published, illustrated by 32 plates.—Professor Esmark contributes diagnoses of two new fishes, *Maurolicus* and *Argyropelecus*, p. 489.

It is with very great regret that we have to record the death of Mr. GEORGE ROBERT GRAY, which took place on the 6th instant, after a short illness. He was born in the year 1808 at Little Chelsea, and was appointed an Assistant in the Zoological Department of the British Museum in 1831. At the time of his death, he occupied the post of Assistant Keeper of that department. He established his reputation as an ornithologist by his *Genera of Birds*, a great work, in the production of which he was engaged for twelve years, from 1837 to 1849. From that time he was *facile princeps* in this branch of science, to which he devoted himself almost exclusively. Only a short time before his death he completed his invaluable *Handlist of Birds*, published in three volumes by the Trustees of the British Museum.

Botany.

Experiments on Hybridization.—Mr. J. Anderson-Henry, one of our most skilful horticulturists, is contributing to *The Garden* the details of some important experiments on pure hybridization, or crossing distinct species of plants. He finds that in those plants which possess two series of stamens, one long and one short, the results vary essentially

according as the pollen is used from one or the other series to effect the fertilisation. He uses the short stamens only in all cases where he wishes to cross a large on a small species, and with the most successful results. The converse also he finds to hold good, remarkable hybrids being produced by using the long stamens where he wished to cross a small on a large species. The reason of this he considers to be that the shorter stamens contain pollen of smaller grains, and therefore better fitted to emit its tubes through the style to fertilise the ovules of the smaller species, and vice versa. The plants chiefly operated upon by Mr. Anderson-Henry are various species of *Geranium*, *Rhododendron*, and *Azalea*.

The Formation of Ozone by Flowers.—It has been found by Mantegazza (*Rendiconti del Reale Istituto Lombardo*, vol. iii. fasc. vi., abstracted in *Der Naturforscher*, 27th April) that many essential oils, like that of peppermint, turpentine, oil of cloves, lavender, bergamot, aniseed, nutmeg, thyme, and others, when in contact with the oxygen of the atmosphere in presence of sunlight, develop very large quantities of ozone. The oxidation of these oils is, in fact, a very convenient source of ozone, as they, even in small quantities, ozonize much oxygen. The action is strongest in direct sunlight, far less so in suffused daylight, and very weak or at an end in the dark. The development of ozone which has been begun in the light continues for a long time in darkness. In the same manner act eau-de-cologne, hydromel, and other aromatic tinctures on exposure to the solar rays. Experiments which Mantegazza has made on flowers with powerful perfume, such as the narcissus, hyacinth, heliotrope, mignonette, and others, in closed vessels proved that they also form ozone. Those with fainter perfume produced less ozone, those without scent none at all. Mantegazza believes that this important source of ozone is of hygienic value for the purification of the air of marshy districts.

New Publications.

- BRUSH, G. J. Appendix to the 5th Ed. of Dana's *Mineralogy*. New York : Wiley.
- DE LA LIBERTÉ ET DU HASARD, essai sur Alexandre d'Aphrodiasis, suivi du traité du Destin et du libre Pouvoir, trad. par M. Nourisson. Paris : Didier.
- DELESSE, M. Lithologie du fond des mers. Paris : Lacroix.
- ENGLER, A. Monographie der Gattung *Saxifraga*. Breslau : Kern.
- FAIVRE, E. De quelques travaux récents sur les corps organisés flottants dans l'atmosphère. Lyon : Vingtrinier.
- FESER, J. Lehrbuch der theoretischen und praktischen Chemie. Berlin : Hirschwald.
- HOEFER, F. Histoire de la physique et de la chimie depuis les temps les plus reculés jusqu'à nos jours. Paris : Hachette.
- KING, C. Mountaineering in the Sierra Nevada. London : Trübner.
- KOCH, L. Die Arachniden Australiens nach der Natur beschrieben und abgebildet. Nürnberg : Bauer und Raspe.
- MÜLLER, J. Terminologia entomologica. 2. Aufl. Brünn : Winiker.
- RAMANN, G. Die Schmetterlinge Deutschlands und der angrenzenden Länder. 3. Lieff. Berlin : Schott.
- REY, E. Synonymik d. europ. Brutvögel u. Gäste. Halle : Schwetschke.
- SCHRAUF, A. Atlas der Krystallformen des Mineralreiches. 3. Lieferung. Wien : Braumüller.
- STEFAN, J. Untersuchungen über die Wärmeleitung in Gasen. Wien : Gerold's Sohn.
- ULRICH, T. Internationales Wörterbuch der Pflanzennamen. Leipzig : Weissbach.
- VAN TIEGHEM, P. Recherches sur la symétrie de structure des plantes vasculaires. 1^{er} fascicule. Paris : Masson.
- VILLARD, F. Du Hachisch. Paris : Delahaye.
- WEISS, C. Ueber Transplantation gänzlich abgetrennter Hautstücke. Tübingen : Fues.
- WIESNER, J. Untersuchung einiger Treibholzer aus dem nördlichen Eismeere. Wien : Gerold's Sohn.

History.

Droysen's *History of Prussian Policy*. [*Geschichte der Preussischen Politik*. 4. Theil, 2. Abtheilung : Friedrich Wilhelm I., König von Preussen.] 3 volumes. Berlin : Veit and Co., 1869-70.

OF Professor Droysen's comprehensive work on Prussian Policy, four parts have now appeared, in ten volumes. The first part, reaching to 1440, describes the origin of the power of the Hohenzollern in Brandenburg, after the Emperor Sigismund, in 1415, gave that electorate (its Ascanian dynasty having died out) to Friedrich of Hohenzollern, the Burggraf of Nuremberg. The second part carries on the his-

tory of the electors to the Thirty Years' War ; the third describes to us the Great Elector Friedrich Wilhelm, 1640-88 ; the fourth contains a history of the first King Friedrich I., 1688-1712, and his successor Friedrich Wilhelm I., 1712-40 ; while a supplementary volume describes the original authorities and discusses critical difficulties. We shall here notice the account of Friedrich Wilhelm I.

Historical events often have not only a preparatory but also a retrospective influence, since they give a meaning and importance to occurrences which the latter would not seem to possess if considered by themselves. The recent growth of Prussian power sets before us the aim as it were of all those events which Droysen describes ; in the beginning we seem to see the end. This is especially the case with our author's later volumes ; in the earlier parts he is not always successful in making it visible to us, but in Friedrich Wilhelm I.'s time it is clear enough. This prince has been often unfavourably judged. The Memoirs of his daughter, the Margravine Wilhelmine of Baireuth, the narratives of Pöllnitz and Seckendorf, &c., represent him as half perverse and half foolish, and this is perhaps still the erroneous view among those readers abroad who recollect Macaulay's essay on Frederick the Great. A more favourable view, however, soon was formed in Germany, where men perceived that wonderful energy and an earnest and honest will and sense of duty lay hid under the rough outside of that arbitrary character. His son and successor already recognised this, though he had himself been not among the least sufferers from the harshness of his father's character. The judgments passed on the king by J. von Müller, Förster, and Preuss, by Ranke and in England by Carlyle, agree in the main with Droysen's view. Droysen too does not go much into the personal character of Friedrich Wilhelm and his court, but confines himself almost exclusively to Prussian policy, i.e. the diplomatic relations and the intercourse of Prussia with the other powers. Perhaps he has done this too strictly, as without altering the main character of his work he might have made it more attractive by noticing many individual traits of character from the numerous sources at his command — and this all the more since the mere diplomatic negotiations were by no means the decisive element in Prussia's history at that time. The state was not powerful enough to determine the course of European politics, and the king was not so much a politician as an administrator. His importance lies not in his external action, but in such an arrangement and concentration of the kingdom's internal resources that his successor could employ them successfully abroad. But though the ordinary reader, especially in foreign countries, may find it difficult to master the book, yet the historian will be not less grateful for Droysen's work, drawn as it is from a thorough investigation into the Prussian archives, which will not need to be made again, though some supplementary notices may be added from other state-archives. Foreign enquirers also will find valuable material here collected, especially for English history—the possession of Hanover connecting England and Prussia closely together.

The first two books contain an account of the Northern War, and that of the Spanish Succession, the latter of which was drawing to its close when Friedrich Wilhelm began to reign. By the treaty of Utrecht, 1713, Prussia obtained in Upper Guelders a long desired addition to her Cleve-Westphalian possessions. It was an advantage too that the king was enabled to concentrate his whole power on the north. The stubbornness of Charles XII. armed not only the Russians and Danes, but even his admirer Friedrich Wilhelm against him, and in 1715 the conquest of Rügen and Stralsund proved the military power of the young state and its new army. The treaties which Sweden made after Charles' death

with Prussia and Russia destroyed her supremacy in the Baltic. Nor could the fruits of victory be wrested from the king as they had been once from the Great Elector. Prussia won the inestimable possession of Fore-Pomerania, Stettin, and the mouths of the Oder. Droysen has gone minutely into the negotiations of this period with the emperor, Russia, England, Hanover, Poland-Saxony. The petty and complicated intrigues of that age contrast strongly with the negotiations of the present day, when the broad interests of great nations are confronted with each other. It would be well for the reader to gain a general view of the subject from Ranke's *Nine Books of Prussian History* before he enters into the labyrinth of detail which Droysen has had to disentangle. This is especially applicable to the last book in the first volume (1721-7), in which our author considers the position of the leading German powers, complicated as it was by the fact that their foreign possessions were more important than their German provinces. Hanover was united with England, Saxony with Poland, Austria with Hungary and with Italian and Slavonian provinces, Brandenburg itself with "Prussia" (in the original sense of the word). But here lay the difference. Though the land which gave the title of the crown lay outside the German empire, yet it was in reality German, and though materially adding to the strength of the electorate (Brandenburg), yet not important enough to remove the centre of gravity beyond its limits. This happy union of "Prussian" and German interests may be regarded as one main cause of the growth and development of the new state. Naturally the rising greatness of such a vassal was not looked on favourably at Vienna. What would it be when, on the dying out of the house of Pfalz-Neuburg, Prussia by the compact of 1660 would gain Jülich and Berg, and therewith a very important position on the Rhine ? The acquisition of this inheritance, contested as it was by the line of Pfalz-Sulzbach, formed the cornerstone of Friedrich Wilhelm's policy ; and the impossibility of getting his claim recognised at Vienna was the chief motive which induced him to join the political union which after the great change in the European system of alliances in 1725 was formed by England and France against the emperor and Spain. Ranke was the first to publish (i. 210) the secret article in the treaty of Hanover, September 3, 1725, between Prussia, France, and England, by which the two great powers agreed to support the king's claim to the Pfalz-Neuburg inheritance ; Droysen has brought to light all the details of this noteworthy agreement. The king however, whose German patriotism of itself disinclined him to foreign alliances, found his expectations disappointed. Holland did not wish the Prussian position on the Rhine to be strengthened ; England and France could not be really relied on ; and so Prussian policy soon took the opposite direction. The transition point lay in the closer union now formed by Prussia with the new Northern power, which had already under Peter the Great taken a distinct line against the policy of England. October 3, 1726, a treaty was made with Russia ; and on the 12th of the same month Seckendorf, whom the emperor had sent as extraordinary ambassador to Berlin, succeeded in bringing about a preliminary treaty between Prussia and Austria—the main point again being that the emperor would favour the Prussian claims on the Rhine. Though this change has exposed the king to the charge of vacillation and fickleness yet it gave his policy a fixed direction for a number of years. Seckendorf's ability, aided by the influence of Grumbkow, the king's favourite, and the well understood interests of the two states, held them together. The book which treats of the alliance with the emperor, 1727-32, shows us how the preliminary treaty

of 1726 was confirmed by the formal alliance of December 23, 1728. Prussia acknowledged the Emperor Charles VI.'s Pragmatic Sanction, by which, on the male line of the Hapsburgs dying out, all the Austrian possessions were to be inherited by Maria Theresia, the heiress of the house; and in case of need Prussia was to support this arrangement with 10,000 men. In return the emperor gave up his claims on Berg to Prussia, and agreed that the king should put himself into possession on the dying out of the Pfalz-Neuburg line. Every one knows what came of this, how the king never got Berg, and how Frederick the Great upheld the Pragmatic Sanction. But Austria meanwhile reaped the advantage that Prussia henceforth supported the imperial interests. After Friedrich Wilhelm's journey to the Rhine in 1730, Prince Eugene wrote to Seckendorf that the king had acted as a true friend of the emperor and with a zeal for him which no man in the emperor's own pay and service could have exceeded.

Consequently the king's relations to the emperor's opponents, and especially to England, became more and more unfriendly, and all the more so owing to the family relations between them. In George I.'s time, while friendship existed between the two closely related courts, a double marriage had been planned, one between the Prince of Wales and the Princess Wilhelmine (afterwards Margravine of Baireuth), and another between an English princess and the Crown Prince Friedrich. The queen and her children were set on this plan, and the king also shared the wish. Now, however, that his hated brother-in-law, George II., sat on the throne of England and Hanover, and their political interests became more and more opposed, it became in the king's eyes more and more dangerous to the peace of his state and his family that the crown prince—already a source of anxiety to him—should be influenced by and partly dependent on a foreign power. All that followed, the family quarrel, the prince's flight in July 1730, the execution of his friend Katte, his own danger of death, is too well known to English readers from Carlyle to need further mention. Droysen too has only gone into it so far as was necessary for connecting the family quarrels with political proceedings, and to show that the king did not oppose the marriage from mere despotic caprice, but on definite political grounds.

Even after the reconciliation with the prince and his marriage with Elizabeth of Brunswick-Bevern, the king's irritation against England continued. But his relations to the emperor also became gradually troubled. The policy of the court of Vienna, cunning rather than prudent, now tried to diminish the price given for the treaty of 1728. Still in January 1732, the king seriously endeavoured to get the Diet to ratify the Pragmatic Sanction, even against the opposition of Bavaria, the Palatinate, and Saxony; but in June he found by a conversation with Seckendorf that the court of Vienna wanted to limit his claims on Berg more than he could allow. To make matters certain, he brought about a meeting with the emperor, and the conference at Prague, August 1–5, 1732, became the turning-point of the so-called "eternal alliance" with Austria. Droysen is the first to point out the true significance of this. Earlier writers, deceived by letters and the outward festivities, have seen nothing here but peace and friendship. In reality Friedrich Wilhelm went back to Berlin with the feeling that he had been tricked; for the emperor and Prince Eugene had wrung from him grievous concessions; in particular he had to renounce his right to Düsseldorf. This disagreement of the two powers injured Germany in the following years—as so often in later times. When Augustus II. of Poland and Saxony died in February 1733, the war of the Polish Succession broke out. The weak and

fickle policy of Austria led her, under Russian influence, and against her own interests, to support Augustus III. in opposition to the rightful King Stanislaus Leszinsky, though she had no more allies, while France and Spain, under the prudent guidance of Cardinal Fleury, were united against her. Of course the King of Prussia could not wish to strengthen a dangerous rival by continuing the union of Poland with Saxony, notwithstanding that he offered to maintain the Rhine frontier with 50,000 men. But this offer was refused from jealousy of the growing power of Prussia, and the Austrian court merely demanded an auxiliary corps of 10,000 men, under the treaty of 1728. The folly of all this was soon shown by the wretched mismanagement of the wars in Italy and on the Rhine. As so often, so now Germany had to pay the penalty by giving up Lorraine to compensate King Stanislaus for the loss of Poland, the previous Duke of Lorraine, Maria Theresia's husband, receiving instead the grand-duchy of Tuscany. This ill success naturally did not add to the friendship of the two powers. At Vienna great part of the blame was laid on Prussia, and less regard than ever paid to the stipulations of 1728. It even became known at Berlin that secret negotiations were being carried on with Prussia's rivals of Pfalz-Sulzbach. At length the king, prematurely old (he had been dropsical since 1735), saw himself obliged to return to the point from which he had started. On April 5, 1739, a treaty was made at the Hague with France, which guaranteed to Prussia at least a part of its claims on Berg—Düsseldorf, however, and the southern districts excepted. The king's feeling against Austria was at its height. "Here is one who will avenge me," said he, pointing to his son, the crown prince.

One cannot call the king's policy brilliant. It is often said that with his resources he might by bold decision have obtained great advantages, whether against Poland, Austria, or Sweden. Droysen has rightly avoided meddling with such combinations or proposing a task for the king which did not suit either the good or the weaker peculiarities of his character. What lay in him to do, that he did with rare energy and success; and if the fortune of a man is to be looked for in his solution of the problem set before him by nature, then was this king one of the most fortunate rulers. He nearly doubled the power of Prussia. His army and treasury were the envy of his neighbours; the town population of the Mark increased from 100,000 to 206,000; Prussia (in the narrow sense) and Lithuania were, when he began to reign, so to say, dead, but now (as Seckendorf admiringly said) had arrived at the same point of culture as Germany. "The body of the state," with these words Droysen concludes his book, "its mechanism, its rule and form were there—a work of art, like Pygmalion's clay image. What was wanted was what this king could not give, the Promethean spark." How this spark was kindled, Droysen will show us in the next volumes, which may be expected soon.

One word on the supplementary volume. It offers us criticisms of the contemporary authors, Manteufel, Rousset, Lamberty, Fassmann, Mauvillon, Martinière, the Margravine of Baireuth, Pöllnitz. The two last are of especial interest. The Margravine's Memoirs appeared for the first time, and in a double edition, at Stuttgart and at Brunswick in 1810. Their genuineness has been often doubted. But the original MS. with the Margravine's own corrections was obtained by Pertz in 1850 for the library at Berlin. Droysen, however, shows by several instances the amount of error contained in these notices, dictated by an almost inconceivable spirit of bitterness and hate against her father and brother. Amongst the very interesting original documents here given we find a pretended "Memorandum of the Holy Congregation of

Cardinals," in 1735, aiming to reconcile all Catholic powers with the object of crushing heretics. Ranke has used this document, i. 419, and Droysen tries to prove it genuine (in the *Proceedings of the Berlin Academy* for June 1869). But I must confess that his reasons have not convinced me; and I have no doubt that it was one of those satirical falsifications so common in the eighteenth century. Manteufel, the Saxon ambassador at Berlin, in writing to his minister, Count Brühl, February 28, 1738, rightly characterizes it as "ouvrage de quelque esprit oisif, mutin et ennemi personnel de la cour de Rome."

HERMANN HÜFFER.

Ranke's Collected Works. [Leopold von Ranke's *Sämtliche Werke*.] Vols. I.-XXI. Vol. XXIII. Leipzig: Duncker und Humblot, 1867-1872.

The Origin of the Seven Years' War. [Der Ursprung des Siebenjährigen Kriegs. Von Leopold von Ranke.] Leipzig: Duncker und Humblot, 1871.

The German Powers and the Confederation of the Princes, 1780-1790. [Die Deutschen Mächte und der Fürstenbund. Deutsche Geschichte von 1780 bis 1790. Von Leopold von Ranke.] 2 vols. Leipzig: Duncker und Humblot, 1871, 1872.

THE great master of modern historiography in Germany, although he has lately entered on his seventy-sixth year, still continues to issue work after work with wonderful rapidity. His stores seem to be quite inexhaustible; and in the full enjoyment of mental vigour the habit of work, which in fact has been the strength of a long life, does not show as yet the least sign of giving way. It is true that Ranke has discontinued his lectures in the university of Berlin since last summer, but merely in order to pursue his literary labours with greater effect. The retirement from his professorship has left a blank which it will be very difficult to fill up again, since at that seat of learning there remains at present nobody who, in a similar degree, combines the same perfection in critical method, the scientific basis of the study of history, with a corresponding taste and artistic manner of exposition. When Ranke published his first book, now about forty-eight years ago, and when he soon after began teaching, he not only adopted the systematic method of research originated by F. A. Wolf in philology and by Niebuhr in history, but he generalised it, and made it the firm backbone for study in any department of universal history. A multitude of pupils have since gone forth from his school, so that there is hardly a chair of history in any of the German universities which is not filled by one of them. There are numberless teachers, too, in the middle-schools of Germany, who either attended his classes or more indirectly owe their knowledge and capacity to Ranke's example. The principle of sifting and weighing by comparison the value of primary and secondary sources of knowledge, and of discovering their literary pedigree, being originally taught with especial reference to mediaeval subjects, as they were multiplied by the contemporary progress of the *Monumenta Germaniae Historica*, has been transferred successfully to the history of all times and of every country. There is no doubt that Greek and Roman historiography, especially since its new epigraphic material has been coming to light, has received an invigorating impulse from the methodical handling of the chronicles, annals, and charters of the middle ages. And the same may be said with regard to the history of the four last centuries, the original sources of which were buried more or less in the archives of the different countries. That the most valuable records of the policy of modern states have only been opened to the scholars within living memory is owing generally to the progress of enlightenment of the age; but it would scarcely have taken place to the extent, and with the amount

of success it has, if there had not been "path-finders" and forerunners like Ranke. Having selected just the history of the sixteenth and seventeenth century for his chief domain, and starting from general points of view, like the connection between the Romantic and the Germanic nations and the papacy, it will ever be remembered how he found his way into the unique storehouse of diplomatic despatches preserved in the vast chambers of the Frari at Venice; and how, in course of time, he mastered also the most valuable contents of the more important collections in Italy, France, Belgium, Holland, England, Germany, and Austria. We doubt whether there is another historian living who has amassed such stores of copies and notes from various places, or who is so competent to give a comparative account of the respective value of each of these record offices.

As an author, Ranke has not been universally acceptable. Some blame him for his objectivity as too cold and unimpassioned. The adherents of political liberalism call him a royalist, an aristocrat, since he writes chiefly from the reports of those who after all were the obedient servants to governments which were despotic without exception. Another very elementary objection misses in his books the entertaining element of detailed narrative, and accuses the superabundance of general view and of argument. The scholar, however, will understand that all these points objected to spring from first principles. In spite of a certain individual mannerism, Ranke approaches the classical model of clearness and conciseness, as near as any contemporary historian, just on account of this objective treatment of his matter. He so little misses the moving spirit in history by overlooking it that in fact there will be few authors who, with the same impartiality, and without any apparent predilection for any political or religious opinion, explore the very mines of literature as well as of political economy, a subject in which both the ore and the dross of a new period generally lie close to one another. Ranke in his ripe age has more than once sat in judgment on his equals, and has invariably done justice to political opponents in the most impartial spirit. We would especially refer in this respect to his short commemorative speech on Gervinus, delivered in Munich on the 27th of September last, and printed in a recent issue of Sybel's *Historische Zeitschrift*, as an excellent specimen of characterization untinctured by any subjective prepossession, and, by the way, well worth the English reader's attention on account of a comparison between the political bias of Gervinus and of Lord Macaulay.

The collected works—an edition commenced at the jubilee of the Professor's doctorate—have been progressing steadily, four or five volumes being issued in the course of the year. Each separate work has been revised most carefully by the author himself, so that the collection includes the latest editions of the history of the reformation in Germany and of the French and the English history. It appears that to each of these works another volume has been added, partly based upon new materials, and partly consisting of some extracts from the choicest accounts still in manuscript. In this manner the historical review of the empire is continued in volume vii. through the reigns of Maximilian II., Rudolph II., and Matthias, tracing the causes of the Thirty Years' War. The extracts added to the former editions of the history of France from the inimitable and racy letters of the excellent Duchess of Orléans, Elisabeth Charlotte, to her aunt, the old Protectress Sophia, at Hanover, have now developed into a separate volume (xiii.). And if we are not very much mistaken, there will be some similar enlargement of the English history, which in its title has dropped the words, "chiefly during the sixteenth century," reserving this predicament exclusively for the next following century.

Vol. xxi. contains the end of the narrative of George II.'s reign, and the first portion of the usual *Analecta*, amongst which a recension of Cromwell's most important speech on the 13th April, 1657, discovered in a British Museum MS. (and much more distinct than the copy reproduced in Mr. Carlyle's work), as well as Ranke's own very elaborate papers on Clarendon, on the autobiographical notices of King James II., and of Burnet's *History of His Own Times*, deserve a special mention. In the appendix we meet with some documents from the royal archives at Berlin, never printed before, and referring to the military assistance which was sent in 1688 by the Elector of Brandenburg to William of Orange, when starting on his ever memorable expedition. The rest of the *Analecta* will probably fill vol. xxii., which is still wanting, with enlarged extracts from the still, in great part, unpublished correspondence of William III., and from the highly interesting despatches, written in French, from London to the court of Berlin, by the Huguenot residents of the Bonnet family. They report regularly during thirty-five years, down to 1720, sometimes so accurately that the debates in the two houses of parliament, for instance, during the anxious time preceding and following Queen Mary's death, may be reconstructed much better from this than from any other source. Vol. xxiii., the last which has appeared, contains the third and in the main unaltered edition of the *Life of Wallenstein*. Perhaps the *History of the Popes* which, since Lord Macaulay's essay, and Mrs. Austin's incomparable translation, has become the favourite with the English reader, may be reissued after this, hardly in a new dress, though very probably too with some important documents found since by the indefatigable author.

We have still to notice two very remarkable productions, which appeared separate from the collected works within the last twelve months, and not uninfluenced by the great events of the immediate past. The essay on the *Origin of the Seven Years' War* grew into a complete book out of a paper read several years ago before the Royal Academy at Berlin. Even such an imperturbable worker as Ranke confesses that when, at the outbreak of the war of 1870, all the young men around him were hurrying away to join the army, it was impossible for him to fix his attention on any subject but one cognate in some respects to Prussia's latest and grandest venture. In such a mood he took up again what had been sketched previously, and connected it with the results of the researches made since in the repositories of all the states which had united for the purpose of annihilating Frederick II. Being fully acquainted, from the original correspondence, with the transactions between France, England, and Prussia, he lamented that the Austrian records were still jealously withheld from the public. But fortunately Arneth brought down his most important work on Maria Theresia to the very period. And in the midst of the din of arms the great Prussian historian was at last permitted to search at liberty in the splendid Vienna collections for the still partly hidden secret of the real transactions which took place before 1756 between the Austrian and the French courts, as well as between Vienna and St. Petersburg. The result is a finished example of historical art, the great difficulties of which nowhere appear through the smooth surface. Yet as the secret and hostile conspiracy, from which the great European conflict of the last century originated, had to be followed up in reference to each of the various governments concerned, and without losing sight of the total march of events, a sort of parallel narrative had to be constructed, in which the seams serve as the most natural lines of chronological transition. Ranke has completed this task with such thorough mastery that causes and effects, and

whatever was really at the bottom of a secret of generations, now at last stand out with complete lucidity. The accusations once so violent in many a country, and for a moment in 1866 revived from the Austrian side, that Frederick the Great, by striking the first blow, had wilfully committed the most flagrant crime, will not be repeated again by anybody who acknowledges the evidence of documents. True, there are no actual repetitions in history, and even the most gifted individual dwindles down in comparison with the silently leading forces of destiny, which sway him as well as his opponents. Yet rulers and governments will ever learn from history, and there is no question that, under similar circumstances, they may act according to precedent with a certain degree of security as to the issue. From the appendix, which contains several dissertations on Frederick's own explanations and the respective value of the memoirs of the Marquis of Valori and of the little book of Duclos, *Histoire des Causes de la Guerre de 1756*, it may be mentioned that the often repeated story of an intimate correspondence between Maria Theresia and the Marquise de Pompadour turns out after all to be an entire invention. The empress in later life stated deliberately that she never wrote to the lady, and only made her a single present, "plutôt galant que magnifique."

Even more elaborate and circumstantial is the last work on our list : *The German Powers and the Union of Princes—German History from 1780 till 1790*. Who can deny that here, too, the most significant phases of a transient experiment are illustrated by the successful termination of a long and eventful development? The reason why no sufficient notice has hitherto been taken of an attempt made by Frederick II. to unite the German governments in a kind of national federation is simply to be found in the tremendous effect of the French revolution and its consequences, by which the nation was almost torn to pieces. We are here introduced to a period in which the old Empire still existed nominally, though it must be confessed that all its real functions were already extinct, when, with the exception of the short warlike bustle of 1778, thanks to the King of Prussia, Germany enjoyed a most welcome internal peace, coinciding with the brilliant resuscitation of her national literature. This is strikingly, but far too shortly, alluded to in the sixth chapter. Once more we meet with the old king hero, but now as the veteran guardian, who keeps steady watch on events at home and abroad, and with consummate skill either wards off their evil influences from his subjects altogether or allows them to reach his realm fraught with some palpable advantage. Next to him rises the Emperor Joseph II., no longer proud to call himself Frederick's pupil, but after his mother's death, in his full-grown tempestuous ambition and feverish effort, to reform not only Austria, which in spite of her many races is tending to become a geographical unity, but church and empire as well. Old Prince Kaunitz, Joseph's chief adviser—he, too, the guardian of a traditional policy—is a figure depicted by Ranke in his best style. We can only mention that the emperor became the ally of Catherine II. in her schemes against Turkey and Poland; that Frederick was in danger of losing that same alliance which already formed an article in the political creed of Prussian statesmen of the type of Count Hertzberg; that the emperor wished to swallow up the electorate of Bavaria, the impotent incumbent of which he proposed to indemnify with the Austrian provinces in the Netherlands; and that, moreover, by certain revivals of his obsolete imperial prerogative he roused the greater number of the German princes against himself personally. Thus it was that in the last year of his life Frederick II., leaning upon the Dutch Republic and upon George III. in

his capacity both of King of England and of Elector of Hanover, promoted the Union of Princes, with the distinct recollection of what the Union of Smalcald had purposed against Charles V., but with a certain national tendency more characteristic of our own age. The steps to the confederacy and its completion, the share which the Prince of Prussia as the heir-apparent and other princes, especially the spirited Charles Augustus, Duke of Weimar, took in it, are most carefully delineated. The narrative pauses for a moment to see the great Frederick die at Sanssouci and Frederick William II. ascend the throne, who, as long as Hertzberg stands at his side, is sincerely inclined to continue in the steps of his eminent predecessor. These were marvellous days so shortly before the awful Paris catastrophe. While Prussia and England reinstated once more the Stadtholder in Holland, while Catherine and Joseph attacked the Turks with their combined forces, the princes of the empire thought of reforming it under a Prussian protectorate, and Prussia herself, in a triple alliance with England and the Dutch Republic, helped to stay the destruction of the Porte. It will be remembered how Joseph II. ended in exhaustion, how the Belgian provinces rebelled against his autocratic innovations, how the Hungarian and even the estates of Lower Austria threatened the same. The death of Joseph II. involved a complete change of policy, for by the treaty of Reichenbach, Prussia and Austria, after their long quarrel, for the first time joined as allies against the dangers rising in the West, and still continuing in the East. The thirty chapters of the book are as usual illustrated by a very rich collection of hitherto unpublished documents. Most curious are the extracts from Frederick II.'s correspondence with the Duke of Brunswick, referring to the state of the world in the beginning of 1782. He hits off most sarcastically the pitiable capacity of the various sovereigns, and alluding to the approaching peace which England has to submit to with her revolting colonies, he writes : "The King of England, after concluding it, will come down with all his might upon the French and Spaniards. I am offered to mediate the peace between them, but under what conditions? Are the Americans to be free or subdued? Can Holland conclude peace without receiving back her lost colonies? Is Lord Bute to continue behind the curtain the leader of affairs? In that case, nobody would have confidence. The abominable corruption which pervades the parliament and the whole nation has degraded the sentiment of honour and the republican nerve which for a long time have given such examples of courage and generosity." And after accusing the prodigious wealth accumulating in England, he continues : "Vous dans votre Basse-Saxe et moi dans ma sablonnière nous n'avons rien à craindre que l'opulence dégrade les sentimens de nos concitoyens, et je préfère notre simplicité, même notre pauvreté, à ces maudites richesses qui pervertissent la dignité de notre espèce." However, a few years later secret articles were signed, which are now printed for the first time. They were contracted on the 13th August, 1788, by the prudent advice of William Pitt, between England and Prussia for the sake of peace in the East. Two sets of documents refer to the confederation of the German princes from 1784 down to 1788, two others contain the pith of the correspondence of Prince Kaunitz with Joseph II. and Leopold II. Many letters from the hand of Frederick William II. which conclude the last volume are well adapted to show this prince in a much more favourable light than is usually the case.

In conclusion, one more remark. It strikes us that the author in his venerable age, writing with very striking emphasis and almost youthful vigour, has dropped his former reserve in dealing with modern subjects. With

regard to the Oriental question, he ventures to hint at the fact that Frederick William II.—"a prince who embraced mankind with human kindness"—had been likewise in favour of seeing a Greek empire restored at Constantinople (i. 31), and that by the Crimean war it was intended to nullify what had been settled seventy years before (i. 162). But nevertheless he remains faithful to his principles, which combine a scientific method with a conservative conviction, which a great success has approved. So he says most emphatically in the preface : "It would be impossible not to have one's own opinion in the midst of all the struggles of forces and ideas, from which spring, in fact, the most decisive transactions. Yet the principle of impartiality may be guarded in spite of that : the meaning of which is that the respective position of the contending powers is recognised, and that the individual relations of each of them are duly estimated. They may be observed separately in themselves, in their contraposition, in their conflict. By their very opposition, the great facts are brought about, and the general development of events unfolded. Objectiveness is at the same time impartiality." It will be most interesting to see such principles applied by Ranke himself, if rumour says right, to the history of Prussian policy, both under Frederick William III. and his son, the late king. In fact, the Hohenzollern dynasty, among other pieces of good luck, has reason to rejoice in the possession of its historiographer royal.

R. PAULI.

Intelligence.

The number of students at the Strassburg University, which we stated on excellent first-hand authority to be 1500, now dwindles down to about 200. Apropos of the recent inauguration, a very instructive little paper has been composed and distributed to the crowd of learned and official guests by the secretary of the Academical Senatus, Dr. A. Schricker, *Zur Geschichte der Universität Strassburg*. It appears from the records, and chiefly from the matriculation books, that the old university, which was twice incorporated by the emperors Maximilian II. and Ferdinand II., since the days of its founder, the celebrated Johannes Sturm, combined the position of a local high-school, in which a remarkable amount of native talent both learned and taught, with the attractions of an academy for the nobility of the empire. During the era of the Reformation Strassburg offered neutral ground to the followers of Luther and of Bucer and Calvin, as well as to the later humanists of the adjacent countries. And even after its annexation to France, the German university was confirmed in all its privileges by the conqueror. Princes and diplomatists of European name continued to crowd the classes of professors, because at the same time they had the advantage of becoming acquainted with the polite manners of the French as they slowly encroached upon the ancient imperial city. Cobentz, Metternich, Montgelas, were students at Strassburg ; and so was Goethe in 1770, as all the world knows. His autograph in the book is facsimilé-ed thus : "Joannes Wolfgang Göthe Moeno-Francofurtensis, logiere bey Hr. Schlag, auf dem Fischmarkt d. 19 Aprilis." Between 1785-87 Strassburg was still an educational resort of international celebrity, where among 125 young men of the best families were inscribed 17 Germans, 16 French, 23 English and Scotch, 3 Italians, 11 Danes and Swedes, 5 Courlanders and Poles, 44 Russians and Livonians. This was the natural result of its geographical position, on the confine or, as it were, on the high-road between two nations. Strassburg, though it lost its own political existence in 1681, had scarcely been injured nationally by the French monarchy. This began when the emissaries of the Convention, St.-Just and Lebas, arrived within its walls to wage their sanguinary war against all "aristocrats and fanatics." In the Journal of the old Faculty of Divinity, whose members too had to suffer in prison and exile, the single word TERROR ! forms a striking entrance of the year 1793. On the 29th May, 1794, it was resolved by the civic council, in order to conquer "l'esprit de localité," and to strangle "l'hydre de germanisme," that the university should be suppressed. As its reminiscences are not gone, there is indeed a fair hope that they will revive together with the new foundation, and that the people of Elsaß in another generation will be proud again of their German seat of learning.

Dr. Gustav Parthey, who died at Rome on the 2nd April of this year, was the grandson of Friedrich Nicolai, the learned philistine and well-known contemporary of Goethe. Parthey, who had inherited from his grandfather considerable property and the old Nicolai publishing firm at Berlin, belonged to the earlier generation of travellers and

Egyptologists in Germany. He has described his travels in Sicily in two learned volumes, 1834 and 1840, and made himself known by a very creditable dictionary of the Coptic language, together with a number of other works and dissertations referring to the history, geography, and philology of ancient Egypt : e.g. *De Philis insula ejusque monumentis Commentatio*, 1830, and *Das Alexandrinische Museum*, 1838. In conjunction with the late Dr. Pinder, after carefully collating all the principal manuscripts, he re-edited the *Itinerarium Antonini*, 1848, and the *Geographus Ravennas*, 1860. To the same predilection for geographical and topographical researches must be ascribed his editions of Pomponius Mela, 1867 ; of the curious mediaeval tract *Mirabilia Romae*, 1869 ; and of *Dicunt Liber de mensura orbis terrae*, 1870. Art-collectors are indebted to him for a very useful catalogue of Wenzel Hollar's prints, *Beschreibendes Verzeichniß seiner Kupferstiche*, 1853 and 1858. He has bequeathed his own large and valuable library to the Instituto di Corrispondenza archeologica at Rome.

The Prussian government, together with the German Reichstag, has recently made a grant for the erection of an Institute of Archaeology—like the well-known one on the Capitol—at Athens, where a small knot of German scholars will soon gather to watch the principal excavations in Greece, and to decipher the newly found inscriptions.

Dr. Paul Scheffer-Boichorst, author of Kaiser Friedrich's I. *Letzter Streit mit der Curie*, Berlin, 1866, who has reconstructed the *Annales Patherbrunenses*, and has written some learned dissertations, chiefly on the sources of the twelfth and thirteenth century, has been called by Dr. Pertz to assist him and Dr. W. Arndt in the editorship of the *Monumenta Germaniae Historica*.

According to an advertisement of E. S. Mittler und Sohn, at Berlin, the first instalment of the official work on the last great French-German war will be soon forthcoming. It has ever since been most carefully prepared by the general staff of the Prussian army, under the superintendence of Field-Marshal von Moltke himself, and with the active assistance of the most distinguished officers who were on the staff of the various German army corps. The bulk of materials, which had been collected incessantly in the very actions of the campaign, is said to be enormous, and at all events required a strict and methodical sifting. The subscription price is 18 thalers.

We must give a few words of encouraging recognition to Mr. W. R. W. Stephens' *Life and Times of St. Chrysostom* (Murray), which is singularly objective and historical in its tone. Biographies are too often written with reference to the sayings and opinions of their subjects as criticised from a modern point of view. Neander's *Life of Chrysostom* is perhaps liable to this charge. Mr. Stephens is conscious of the difficulty, and has, we think, carried out his leading idea well. Church's *Life of St. Anselm* may have served to rouse his emulation, and Dean Hook's son-in-law may feel a sort of natural impulse to write the history of the great archbishop of the Eastern Church. The narrative is clearly given, and Mr. Stephens has cautiously abstained from introducing modern points of view, which, after all, are utter anachronisms. Everything is so merely in the germ in Chrysostom's time that he is not of so much use in modern controversy as might be expected. Roman Catholic writers wonder how he and "St. Basil could allow themselves to speak of the Virgin Mary as they do ;" a Calvinist finds him very unsatisfactory about predestination and election. Is it not time to deal with church history as we have long done with philosophy, and cease to read modern ideas backwards into our authors ? Chrysostom's actions must all be considered from the point of view and the necessities of his age. He became an ascetic monk ; but the excessive corruption of the great cities drove most men who wished to lead a devout and honest life into retirement. In fact we may almost use the prevalence of monasticism as a barometer to weigh the corruption of an age. As soon as a good life becomes fairly possible in society, monasticism declines ; till then it exists by its own necessity. In our own days the necessity may still exist for individuals ; it has ceased for whole classes of men. But the system was always accompanied by great evil. "Nothing," says Chrysostom, "had inflicted more injury on the moral tone of society than the supposition that strictness of life was demanded of the monk only." The system withdrew from the earth those who were meant to be the salt of it. He trusted the time might come when these refugees would be able to return to the world with safety. Similarly the feeling as to marriage or celibacy was largely influenced by the generally degraded condition of women in that age. The early life of Chrysostom under the charge of his mother Anthusa may be compared with that of Augustine under Monica ; very tenderly does Anthusa appeal to her son not to deprive her of his protection, companionship, and help, who had devoted her life to him by retiring into a monastery. He studied under the heathen rhetorician Libanius, who would have made him his successor in the school of rhetoric "but for the Christians having made him a proselyte." And to the last his Homer and his Plato influence his writings. When he says that the star of Bethlehem, which came and "stood over where the young child was," must have been not a star, but some one of the heavenly powers which shot down from heaven to give the sign, was he not thinking of *Iliad*, iv. 75, where a heavenly power shoots down "like a star" to earth as a sign to

Greece and Troy ? His work at Antioch and Constantinople is described at length, and good illustrations selected of the manners of the time ; the baths and theatres, the dresses and fashions, everything contributes some minute touches to the picture of licentious luxury all around him. His later life, his persecution by the Empress Eudoxia, and by Theophilus of Alexandria, and his death in exile, are drawn out in a sort of natural sequence. For this part, Thierry's late articles on Eudoxia in the *Revue des deux Mondes* have been of essential service. We learn from his homilies many curious details of church development. Thus the great sermon on Christmas Day, 386, tells us that this festival was not originally celebrated in the Eastern Church ; it had been adopted from the West, and, in Antioch at least, less than ten years before the year of Chrysostom's discourse. The tone of Chrysostom's commentaries is especially remarkable. He interprets the sound sense and judgment, adhering closely to the literal and historical meaning of the text. It is quite refreshing to read his homilies ; they stand out in such contrast to the unreal fancies of so many of the early writers. The last chapter contains a survey of Chrysostom's theological teaching, and is clearly put together. The value of such a survey is to show us that theology may be cast into a very different shape from what we are accustomed to in the West. "Merit," "satisfaction," "decrees," "forensic justification," "imputed righteousness," are terms which do not occur in the writings of the Greek theologian, because they are the expression of ideas in which he felt no interest ; they are the offspring of the Roman mind in which legal ideas were dominant. Burnet found this out, and it had such an effect on him that he says, in the preface to his *Exposition of the Thirty-Nine Articles*. "I follow the doctrine of the Greek Church, from which St. Austin departed, and formed a new system."

New Publications.

- BUTTMANN, Aug. Agesilaos, Sohn des Archidamos ; Lebensbild eines Spartanischen Königs u. Patrioten, nach den Quellen dargestellt. Halle : B. des Waisenhauses.
- EGGER, J. Geschichte Tirols von den ältesten Zeiten bis in die Neuzeit. I. Bd. 5. Lfg. Innsbruck : Wagner.
- FICKER, J. Ueb. die Datirung einiger Urkunden Kaiser Friedrichs II. Wien : Gerold's Sohn.
- GACHARD. Les Seigneuries et les seigneurs en Brabant au 18^e siècle. Bruxelles : Muquardt.
- GRÜNHAGEN, Colmar. Die Hussitenkämpfe der Schlesier, 1420-1435. Breslau : Hirt.
- HERTZBERG, G. Die Feldzüge der Römer in Deutschland unter den Kaisern Augustus u. Tiberius. Nach den Quellen dargestellt. Halle : B. des Waisenhauses.
- HISTORISCHES TASCHENBUCH, begr. durch F. v. Raumer. Hrsg. v. W. H. Richl. 5. Folge, 2 Jahrg. Leipzig : Brockhaus.
- HÖHLBAUM, K. Joh. Renner's livländische Historien u. die jüngere livländ. Reimchronik. I. Thl. Göttingen : Vandenhoeck u. Ruprecht.
- LAMBERT, H. Bericht üb. die im August u. Septbr. 1871 in Ober-Oesterreich angestellten Weisthümer-Forschungen Wien : Gerold's Sohn.
- PANNENBORG, A. Studien zur Geschichte der Herzogin Matilde v. Canossa. Göttingen : Vandenhoeck u. Ruprecht.
- PIERRE LE GRAND, Les Auteurs du Testament de. (Page d'Histoire.) Paris : E. Dentu.

Philology.

MÉLANGES ÉGYPTOLOGIQUES. Troisième Série. Tome I. Par F. Chabas, avec la collaboration de MM. S. Birch et Ch. W. Goodwin. Paris et Châlons-sur-Saône.

In this new part of his *Mélanges*, M. Chabas, who is the author of almost the whole, mainly devotes himself to texts bearing on the administration and civil life of the ancient Egyptians. The principal essay is an analytic translation of the Abbott Papyrus in the British Museum (already published by the Trustees, with a valuable introductory notice by Dr. Birch), a document recording an official enquiry in the reign of Ramses IX. of the 20th Dynasty into certain acts of spoliation in the royal and other tombs at Thebes. This subject naturally suggested to M. Chabas, who is always resolute in his determination to obtain as positive results as the nature of the case admits, a thorough enquiry into the administration of the laws under the Pharaohs. To this we owe a very interesting discussion as to the precise meaning

of the Judicial Papyrus of Turin, in reply to the explanation of M. Devéria. That lamented scholar had published this papyrus with a translation, which made the Pharaoh, Ramses III., to whose reign it relates, prejudge persons accused, and, further, taking the place of the judges, himself pronounce judgment on a certain number. Such a case would be directly contrary to the statements of the classical writers on these matters, which, as M. Chabas well remarks, were based on notorious facts, not on the observation of persons unacquainted with the native language. Without, however, laying any undue stress on this evidence, he analyses the text translated by M. Devéria, and comes to a very different conclusion, for he shows clearly that there was no direct intervention of the king in the case. It might seem surprising that so wide a difference of opinion should be possible between two accomplished Egyptologists, were it not well known that the texts of the hieratic papyri are generally far more difficult than those written or engraved in hieroglyphics, from the carelessness and caprices of the scribes, and the occasional extreme obscurity of the more cursive forms of the character. We have often to deal with the running-hand notes of an Egyptian scribe, written very fast and meant only for his own use. It is, therefore, no discredit to the memory of a singularly able scholar that he should sometimes have found himself unequal to a task which even M. Chabas, whose knowledge and acuteness in this department are unequalled, occasionally finds almost beyond his powers. But it is precisely this difficulty that renders the study of the hieratic papyri the most fruitful in the domain of Egyptology, at least so far as the language is concerned. The student is compelled to compare all accessible documents, to pay the utmost attention to grammatical niceties, and not least to refer constantly to the vocabulary and grammar of Coptic, which of late has been scarcely admitted to its rightful place in the enquiry.

Passing from the introduction to the analysis of the document, many points strike the reader which show the wide bearing of Egyptology. In the papyri of the Ramses age, the occurrence of Semitic words transcribed in Egyptian has been frequently remarked. This was an influence like the successive influences of Italian and French on English. The similarity of certain Egyptian roots with Semitic ones has not been as generally acknowledged. It is, however, a phenomenon equally observed in our own language in the case of roots of common origin with Italian and French ones. Hence we find M. Chabas objecting, "On a pensé que le mot *Sar* [seigneur] avait pu être emprunté par les Égyptiens aux langues araméennes ; mais on le trouve sur les plus anciens documents, c'est-à-dire à une époque où les rapports de l'Égypte avec l'Asie-Centrale ne peuvent encore être distinctement entrevus, et où par conséquent des emprunts de cette nature ne peuvent être supposés que sur des présomptions tirées de l'homonymie, ce qui ne saurait suffire" (p. 162). Here a certain similarity between two languages pointing to a common descent, in part or whole, is not recognised, and nothing is admitted beyond direct borrowing. But surely Semitic words in Egyptian, written with full vowels, like *marukabuta*, a chariot, מְרֻכָּבָה, *shakaru*, a shekel, שָׁקָרָעַ, and Egyptian words in Hebrew, like the proper names פָּנֵחִי, e.g. *Pa-nehi*, and חָרְנֵפֶר, *Har-nefer*, are directly borrowed, preserving their original forms, and have nothing to do with roots common to both Egyptian and Semitic, which have proper Egyptian and Semitic forms, like *ptch*, פְּתַחַת, and *khtem*, חַטֵּם.

It is not alien to this subject to quote a very curious illustration of a difficult passage in Genesis. M. Chabas is noticing the Egyptian mode of taking an oath. "Il prononça

alors le serment ordinaire : Par la vie du Seigneur Vie-Santé-Force, en se frappant le nez et les oreilles et se pliant sur le sommet [or "on"] du bâton. Il s'agit du bâton, insigne habituel des Oérous [magistrats], que le magistrat tenait étendu pendant la formalité. Le prévenu montrait, par cette attitude et par ces gestes, sa soumission envers le magistrat et la connaissance qu'il avait des châtiments par lui encourus, si sa culpabilité venait à être démontrée. Certains crimes étaient en effet punis par l'ablation du nez et des oreilles, et le plus grand nombre des délits par la bastonnade. L'histoire du patriarche Joseph, dans la Bible, est fortement imprégnée des idées égyptiennes ; elle nous présente une épisode qui a quelque analogie avec celui que nous venons d'analyser. Sentant sa fin prochaine, Jacob fait jurer à son fils qu'il ne le fera pas enterrer en Égypte. Joseph prête ce serment à la manière des anciens Hébreux, c'est-à-dire en plaçant sa main sous la cuisse de son père. Mais Jacob ne méconnaissait pas l'importance du maître de l'Égypte ; le serment prêté, il s'incline sur la tête du bâton de son fils, יְהוָה יְשָׁאֵל עַל־דָּרָשׂ הַמֹּתָה (Genèse, xlviij. 31)." — Pp. 91, 92. This is at least a plausible explanation of a passage in which the Septuagint reading, supported by the New Testament, has never been either disproved or explained. Of course, "de son fils" is only a Targumic addition by M. Chabas. The Septuagint has ἐτί ῥὸς ἀκρον τῆς πάθους αὐτοῦ.

The second essay, similar in subject to the first, is the joint work of Dr. Birch and M. Chabas. It relates to a papyrus which appears to be of the time of Setee II. of the 19th Dynasty. One point of great interest is raised by it. The culprit to whom it refers was saved from punishment by appealing to "an individual called Mési, of whom neither the titles nor the functions are indicated."

"Ce Mési était évidemment un personnage très-influent, puisqu'il réussit à préserver Panéba des poursuites du Gouverneur. Nul doute qu'il n'appartient à la famille royale. M. Lepsius a rangé à la suite des princes de la famille de Ramsès II un fils royal de Coush, basilico-grammate, du nom de Mès. C'est vraisemblablement le même personnage." (Pp. 190, 191.)

This observation, accentuated by a note drawing attention to the fact that the governor was among the highest Egyptian functionaries, is very curious in relation to the story that places the Exodus in the time of Menptah, the father of Setee II., for the name of the powerful individual so strangely mentioned without any title is very like that of Moses. Curiously enough, however, we find at this period two princes of Cush, both bearing the name in question, Mési (Mes-sui ?) under Ramses II. and Mes under his son Menptah. (Lepsius, *Königsbuch*, Taf. xxxv. xxxvi.) It may be asked whether the occurrence of this name had anything to do with the fixing the Exodus to this period in the Manethonian story ; but there it is said that the Egyptian name of Moses was Osarsiph. The whole subject is full of difficulty. It may, however, be remarked that this interesting joint essay throws light upon the history of the age of Setee II., showing that Egypt was then in a disorganized state.

Among the other essays, that on the Price of a Bull is valuable in reference to the origin of money, and that, by Mr. Goodwin, on an Inscription of the reign of Shabaka, is very important as bearing on the myth of Osiris.

M. Chabas states in the introduction to this volume that he has more essays of his own nearly completed, and others by the friends who have worked with him. Every student of Egyptology must look with great interest to the continuation of a publication conducted under exceptional difficulties, and of more than exceptional value.

REGINALD STUART POOLE.

Germanic Studies. [Germanistische Studien, herausgegeben von K. Bartsch. I. Bd. Wien: C. Gerold's Sohn.]

Of the eight essays contained in this volume—originally written for Bartsch's *Germania*—the most interesting for English readers is that by Karl Regel on the alliteration in Layamon, with some general remarks on the metrical form of the poem. Its main characteristics, according to Regel, are its freedom of structure and its extraordinary development of every kind of rhyme, end-rhyme, internal rhyme (Binnenreim), and letter-rhyme or alliteration. The same tendency is shown in the very frequent repetition of two or more words at the beginning of two consecutive verses, as in *ful swide us mæi scomien, ful swide us mæi gromien*—a rhetorical figure which is alike unknown to the older A.-S. poetry and to the Old French original, and was no doubt developed independently by Layamon. Many of his alliterations are also original, as is clearly shown in the case of foreign (Celtic) names, which are almost always introduced in alliterative combinations: *Selemon þe sele* and *Cadwalan þækene*, &c. Others again are purely traditional, and these Regel has collected and arranged systematically. He begins with combinations of words of the same root, such as *tale tellen*, which he is probably right in regarding as the most primitive of all, and classes the rest under the different heads of words allied in meaning (*fisc and flesc*), contrasted combinations (*ord and ende*), and the various combination, of verb, adjective, and substantive. The value of these lists with their almost exhaustive fulness and their excellent grouping, is further increased by the parallels given from the cognate literatures, which not only clear up obscurities of form and meaning, but also show that many of Layamon's alliterative combinations which do not occur in the extant A.-S. literature, really form part of the common Teutonic stock. In most cases of difficulty we fully agree with Regel's explanations; some, however, seem to call for criticism. He translates *wunien on wunsele* by "in Wohnsitz wohnen;" the analogy of the A.-S. *wynburg*, &c. points rather to the meaning "Wonnesaal." In *hunger and hete* the translation "Hunger and Hitze (d. i. brennendes Verschmachten)" seems very forced. Madden, who translates "hatred," has only erred on the side of over-literality: the meaning of the word in this combination is simply "affliction." In the old poetry the ideas of "hostility," "crime," "punishment," and "affliction," are almost convertible, as will be evident to any one who looks over the passages which Grein has collected under *synn, mordor, nit*, &c. Conclusive evidence is afforded by the Old Saxon *hungar hetigrim*, quoted by Regel himself, which he would alter into *hêtigrim*.

Theodor von Hagen's article on the manuscripts of Gottfried's *Tristan* is the first attempt that has yet been made to settle definitely their relationship and critical value. He classes them under two groups, one represented by the Heidelberg and the Munich MSS., the other by the Florentine and a large number of inferior MSS. The two lost MSS. which formed the originals of these groups appear to be of equal authority; hence their readings must be compared systematically, and in cases of divergence it must be settled which of the two prototypes had the better reading. A right understanding of the relationship of the two groups is of especial importance in cases of disagreement between two representatives of the same family. If in such a case one of these divergent readings is supported by the reading of the other group, this reading will probably be the correct one. Thus in 36, 11, the F. group reads *umb kein ander himelriche gegeben*, H. has *umb kein ander künecriche gegeben*, while the editors have adopted the reading of M. *umb tūsent künecriche gegeben*. But the agreement of H. and the F. group shows that the three first words *umb kein ander* must

be retained, while the *künecriche* of the prototype of M. and H. may be easily explained as a mere graphic corruption of *himelriche*. The true reading is then *umb kein ander himelriche gegeben*, which, with its peculiar use of *himelriche* in the sense of "Himmelsglück," as v. Hagen translates it, is quite in Gottfried's manner, and is in every way preferable to the commonplace reading of M. This, together with several other instances, shows that much remains to be done before the text of the *Tristan* can be considered as definitely fixed.

The general result of Karl Meyer's article on the "Tell-sage" is to enroll Tell in the already overcrowded ranks of the solar myths, while the tyrant Gessler turns out to be nothing more substantial than the clouds and mists which are pierced by the weapons of the sun-god. The other element of the myth—the shooting of the apple from the child's head—he confesses himself unable to explain. We must, however, protest against the depreciation of the apple, of which he says that it "überall nur als an und für sich gleichgiltiges Mittel zum Zwecke erscheint." The fact that the apple appears in nearly all the various renderings of the myth—even, as we learn from a note, in a Persian story of the same kind—certainly points to the directly opposite conclusion. It is not impossible that the key to this part of the myth may be found in Idunn and her apples of immortality. It will be seen that Meyer's explanation of the "Tell-sage" is thus incomplete and unsatisfactory; we think that the real value of the essay lies in the remarks on the relation between history and mythology, and the importance of distinguishing carefully between the purely mythological nucleus of a tradition and the historical accretions which afterwards modify it, instead of attempting to discover a mythological explanation for every detail—a course which is too often pursued by comparative mythologists, and tends to bring both themselves and their science into discredit.

Of the remaining essays a mere enumeration must suffice. The most important of them is an elaborate and apparently exhaustive account of the syntactical use of the optative in Gothic, by Arthur Köhler. Konrad Maurer's examination of the so-called "Kristinréttir" of king Sverrir leads him to the conclusion that the king had nothing to do with the compilation of the laws in question. "Wetzels heilige Margarete," by the editor; "Hester," by K. Schröder; and "Das niederrheinische Bruchstück der Schlacht von Aleschans," by H. Suchier, treat of special points of Middle High German literature. The first two give critical texts of newly discovered poems with literary and philological remarks. Neither of the pieces seems to have much literary merit, although the second is of interest as being the only poetical paraphrase of the Book of Esther that is known to exist in Middle or Old High German, and also on account of its author, whom Schröder proves by the most convincing evidence of style to be no other than the unknown author of the *Passional*.

HENRY SWEET.

THE LATE PROF. GOLDSTÜCKER'S PAPERS.

TO THE EDITOR OF THE ACADEMY.

SIR.—So many public and private expressions of opinion respecting my intentions with regard to the manuscripts of my late brother, Prof. Theodor Goldstücker, have come under my notice, reposing for the most part upon imperfect information, that, as the matter is one of some public importance, I am induced to request your permission to state them briefly and correctly in your valuable journal.

The MSS. left by my brother are of two kinds. The first, to which he himself attached the chief importance, relate to his general work, and will, in all cases, be preserved. Arrangements have been already made for their publication. The second are the MS. indices prepared as the foundation for his *Sanskrit Lexicon*, which was in

progress when he died. According to the opinion of an authority in whom my brother reposed entire confidence, these indices are not so much bricks for an edifice as clay out of which bricks have to be made. They could only be used by persons possessing a similar knowledge of the language, and able to deal with them independently. To such an extent is this the case, that it would be impossible for any Sanskrit lexicographer who employed them, to distinguish in the complete work what was his own and what was Goldstücker's.

Now, my brother, fully aware that his own scientific method of treating the subject, to which he devoted his life, was irreconcilably opposed to that adopted by the majority of his co-workers, felt that the use of his indices, after his death, by persons using a thoroughly antagonistic method, would lead to deplorable results unless specially controlled. This feeling occasioned him unmixed regret, but became predominant, so that he was resolved at all hazards, even by personally burning his own MSS., to prevent such a misuse of his labours. This design formed the subject of many conversations between us, especially towards the close of 1869; and his disturbed state of mind at my not recognising his right to ensure the final and unconditional destruction of his MSS. convinced me that I had only the following alternative to consider: to give him the hope that I would fulfil his instructions, and thus probably prevent him from destroying his MSS. with his own hand; or to deprive him of this hope, and thus probably render their destruction certain. But I could not make up my mind to this alternative without a reservation. Acknowledging that my devotion to the interests of my brother's science must ever be less than his, and that no one could judge better than himself how those interests could be most advanced, I promised not to neglect his directions, provided none of them bore the marks of passionate precipitation. This promise continues binding.

When, therefore, I received the startlingly sudden news of his death, I came to England, fully convinced that no change had been made, and nerved to make a sacrifice which it had been the very object of my promise to prevent. I found a change—a partial, but not a complete remission. While my brother was still in health, he told a person, whose word I can thoroughly trust, that if the MSS. would fetch 500/- they need not be burned. I considered this large sum to be fixed in order to escape from any mercantile speculation. But this change of disposition justifies me in preserving the MSS. for the moment; indeed, as no time was fixed within which this price is to be obtained, the period is left to my own determination. If the money be obtained, it will be handed over to the person named in my written stipulations respecting my brother's literary remains in England, left in charge of Mr. Hepworth Dixon, who has had the kindness to act under my power-of-attorney. I have also thought proper to attach other conditions to the purchase, which will be communicated to any intending purchaser, having for their object the prevention of any such scientific misuse of these MSS. as my brother was anxious to prevent; but I lay no value upon them for their own sakes beyond their being the only ones which I could discover for the moment, to fulfil my conflicting duties with a clear conscience. To preserve the indices, without prejudice to the scientific interests which my brother wished to secure, will ever remain the sole rule for my conduct in this transaction.

Berlin, April 28, 1872.

WILHELM TOBIAS.

Intelligence.

A letter from a missionary in China, lately published in the *Daily Globe* of Toronto, Canada, affords important testimony to the great linguistic value of Mr. Bell's "Visible Speech" alphabet. The writer states that his study of the language has been successful, and greatly aided by the new alphabet. It has given him a great advantage over those who are learning beside him, so that, although they have the advantage of having been in the country two or three months before him, he can read three characters to their one, and they cannot pronounce correctly. It appears that many who had devoted a long time to learning the language with the Roman alphabet were giving it up in despair. The writer undertakes in one month to supply a visible speech lesson-book, by which people at home could learn Chinese as easily—indeed more easily—than with a teacher. Visible speech has also been applied in America to teach articulation to deaf mutes, and has succeeded perfectly, even the intonations of the voice being imparted to the pupils. There seems every reason to believe that before long the system will be in universal use for this purpose throughout America.

Dr. G. Bühler, of Bombay, has issued the first part of a Catalogue of Sanskrit MSS. contained in the private libraries of Gujarat, Kāthiāwād, Kachchh, Sindh, and Khāndesh. It is merely intended to be a survey

of the Brahminical libraries in that part of the presidency, and, as such, will be highly useful to Sanskrit scholars. New lists, Dr. Bühler says, are now being prepared, in which the first and last slokas are to be given. The original lists, from which this volume was compiled, include upwards of twelve thousand MSS. It contains the Vedic literature, under the heads of *Mantrasanhitas* (182 MSS.); *Brāhmaṇas* (82 MSS.); *Upanishads* (620 MSS.); *Sūtras*, *Parīṣṭas*, *Kārikas*, &c. (320 MSS.); the remaining *Vedāngas*, *Anukramanikas*, &c. (90 MSS.); and an appendix containing 179 MSS. under the head of *Prayogas*. Dr. Bühler estimates the total of the Brahminical MSS. in the larger libraries of his division at upwards of 30,000. The *Jaina* books he takes to be much more numerous, and probably to amount to four or five times that number. As this branch of Hindu literature is yet very little known, he proposes to give first a list of the oldest works, the *Sūtras*, with a short analysis of each, and a general survey of the whole literature according to the Jaina authors. Dr. Bühler also expresses his readiness to procure copies of the MSS. contained in the catalogue—ordinary copies at the rate of Rs. 2½-3 per 1000 slokas, and corrected ones at Rs. 4-5 per 1000—for any scholar who may apply to him.

A very interesting recent publication is Signor John Beludo's *History of the Greek Colony at Venice*: Ελλήνων ἀποικία ἐν Βενετίᾳ, ἱστορίης ἰδεύματα Ἰωάννου Βελούδου. Ἐν Βενετίᾳ, τυπ. τοῦ Ἀγίου Γεωργίου, 1872. The author (well-known as the sub-librarian of the Marciana at Venice) has availed himself of numerous unpublished documents, and has thus succeeded in giving a faithful account of the history of the Greek colony at Venice, which was the centre of Greek intellectual life from the sixteenth century until the foundation of the Greek kingdom. The Greek college and the various Greek presses are treated at considerable length. As the work is written in very pure Greek, we venture to recommend it both to lovers of Greek literature and friends of accurate historical investigation.

The first volume of Mr. Const. Sathas' Μεσαιωνικὴ Βιβλιοθήκη is now ready, forming a well-printed volume of 312 pages of text with πλη̄ (138) pages of introductory matter. Instead of three volumes, as we stated in a previous number of our journal (vol. iii. p. 20), the work is now intended to fill no less than six, owing to the addition of most important historical extracts from the *Diarii Storici* of Marino Sanuto which exist in MS. at Venice, and of two volumes of Byzantine Anecdota, including an inedited historical work of Michael Psellus, and historical speeches and letters by Nicetas Choniates. We shall recur to the work as soon as the second volume is published, in which the editor promises the mediaeval chronicles of Cyprus, and an account of inedited coins from the pen of Mr. Paulus Lambros, a gentleman justly celebrated for his accurate knowledge of mediaeval Greek antiquities.

Messrs. Teubner have just published the first volume of a biography of the well-known translator and poet John Heinrich Voss, from the pen of Professor W. Herbst. The style of the volume is very readable, the course of the relation not being interrupted by continual references and foot-notes, as is unfortunately the case in many German publications. To insure accuracy, there is at the end of the book an appendix entitled "Sources and References," with the usual fulness and elaboration of German philological research. Of great interest are the letters exchanged between Voss and Heyne; and friends of German literature will meet with much new material concerning the life and opinions of Klopstock and other literary characters of the second half of the eighteenth century. The present volume carries the life of Voss down to his removal from Otterndorf to Eutin, and thus leaves by far the most important part of Voss's life to the second volume, which we hope to see at not too long an interval after the appearance of the first.

The first number of Messrs. Teubner's *Mittheilungen* of this year, contains notices on the following publications: (1) Homeri *Ilias*, ad fidem librorum optimorum edidit J. La Roche; (2) a Manual of Greek and Latin metres, by W. Christ; (3) a new instalment of Bursian's *Geography of Greece*, containing the Islands; (4) a Manual of German antiquities and commentary on Tacitus' *Germania*, by the late Professor A. Holtzmann, edited by Holder; (5) a new edition of Ammianus Marcellinus, by Gardthausen, and a number of school-books.

The January number of the Greek journal Πανδόρα contains the first edition of the mediaeval Greek poem *τρεπλ τῆς ξενιτελας*, found in the Vienna MS. The text is printed from a copy made by Mr. Sathas, but is still capable of emendation in more than one place. The poem is an artless, but by no means inelegant composition, in 548 lines, in which the fervent love of their native soil, always inherent to the Greek character, is well expressed by one who had himself tasted all the bitterness of exile. There are frequent traces of the employment of popular songs in this poem.

It gives us much pleasure to notice the second edition of the second part of the late Professor Conington's *Virgil* (containing the first half of the Aeneid). It speaks well for English students and scholars that so excellent and refined a work as this has so soon reached a second edition. We venture to recommend continental scholars to take more notice of the Professor's notes and introductions than they appear to do at present.

Contents of the Journals.

Journal of the Royal Asiatic Society, new series, vol. v. pt. 2.—I. Specimen of a Translation of the *Adi Granth* of the Sikhs; by Dr. E. Trumpp. [Twenty hymns, in the original ancient Gurmukhi, are here given, with an English translation and critical notes, of this holy book of the Sikhs, which Dr. Trumpp is now translating for the Indian government.]—II. Notes on Dharmapada, with special reference to the question of *Nirvâna*, by R. C. Childers. [A number of passages is here commented upon and translated differently from previous interpreters, in support of the writer's view, that *nirvâna* is a state of blissful freedom from human passion on earth, followed by annihilation after death.]—III. The *Brihat-Sanhîtâ*; or, Complete System of Natural Astrology of Varâha-mihira. Translated from the Sanskrit into English by Dr. H. Kern. [Continuation; chapters 16–35.]—IV. On the Origin of the Buddhist *Arthakathâs*; by L. Comilla Vinasinha; with an introduction by R. C. Childers. [The Sinhalese scholar endeavours to prove that the commentary on Buddha's sermons mentioned by Buddhaghosa as having existed during Buddha's lifetime, and collected at the first council immediately after his death, were desultory discourses delivered by Buddha in explanation of the *pitâkas*.]—V. The Poetry of Mohamed Rabadan of Aragon; by Lord Stanley of Alderley. [Continuation. This portion of Rabadan's poem, in the Morisco-Spanish, relates the history of Shaibeh or Abdulmalib, the son of Heshim, and of his son Abdullab, the father of the prophet.]—VI. *Proverbia Communia Syriaca*; by Capt. F. Burton. [A collection of 187 modern Arabic proverbs, text, translation, and notes.]—VII. Notes on an Ancient Indian Vase, with an account of the Engraving thereupon; by C. Horne. [The vase here described, and since acquired for the India Museum, was found in the Kûlû country, near the junction of the Chandra and Bhagur rivers. The writer believes it to be Buddhistic, and fixes its date at about 200 or 300 A.D.]—VIII. The Bhar Tribe; by the Rev. M. A. Sherring, of Benares. [This tribe, also known by the terms Râjbhar, Bharat, and Bharpatwa, once occupied the tract of country between Gorakhpur in N. India and Saugor in C. India. The paper is illustrated by seven plates of bearded Bhar figures.]—IX. Of Jihâd in Mohammedan Law, and its Application to British India; by N. B. E. Baillie. [The writer endeavours to show that Jihâd, or religious warfare, on the part of the Indian Mussulmans against the British government, is unlawful according to Mohammedan law.]—X. Comments on Recent Pehlvi Decipherments; with an Incidental Sketch of the Derivation of Aryan Alphabets; and Contributions to the Early History and Geography of Tabaristân; by E. Thomas. [The writer adduces some fresh material in support of his theory that the Pehlvi letter, read as *m* by the Pârsis, and by Du Perron and De Sacy, is to be read as long *f*; and contrasts his method of Pehlvi interpretation by starting from the early alphabets preserved on medals, seals, &c. with that of other scholars who try the language of the inscriptions by the backward test of the Pârsi fragments still extant.]—Annual Report.

The Indian Antiquary, ed. by J. Burgess; part iii. (Bombay, March).—Sketches of Mathurâ; by F. S. Growse. Description of the country near Mathurâ, and historical account of that place.]—On the Identification of various Places in the Kingdom of Magadha visited by the Pilgrim Chi-Fah-Hian; by A. M. Broadley. [Continuation; of the Mount Baibhar.]—The Jungle Forts of Northern Orissa; by J. Beames. [Continuation.]—Biographical Notices of Grandees of the Mughul Court; by H. Blochmann. [The first of a series of biographical sketches of Amîrs of the reigns subsequent to Akbar, chiefly drawn from the *Mâdsîr ul Umârâ*, by Shah Nawâz Khân of Aurangâbâd. It begins with Shaikh Dâud Quraishi, who served under Dârâ and Aurang-zib.]—The Indigenous Literature of Orissa; by J. Beames. [A list of (82) ancient Uriyâ works known to be in existence.]—Translation of and Remarks on a Copper-plate Grant discovered at Tidgundi in the Kalâdgî Zilla; by Shankar P. Pandit. [A Châlukya grant from the time of Tribhuvana Malla Deva (? A.D. 1083).]—Dardu Legends, Proverbs, and Fables; by G. W. Leitner.—Reviews. [Favourable; of Fergusson's *Rude-Stone Monuments*; and Broadley's *Ruins of the Nâlandâ Monasteries*.]—Miscellanea.—Part iv. (Bombay, April).—Tamil Popular Poetry; by R. C. Caldwell. [Three poems, in Tamil and English, by Sivakkîyar and Puttiragiriyar.]—On the Non-Âryan Element in Hindi Speech. [Upholds Lassen's theory, that almost all, if not all, Prâkrit words are derived from Sanskrit, against that of Muir, that in the modern vernaculars words not derived from Sanskrit are very numerous.]—On the Identification of Various Places in Magadha, &c.; by A. M. Broadley. [Continuation; on Mounts Vipula, Ratnagir, and Udayagir.]—On the *Chandikâshata* of Bâna-bhâṭṭa; by G. Bühler. [Account of that work, being a century of stanzas in honour of the goddess Chandi. The fact that a poem of that title had been composed by Bâna, the author of the *Kâdambarî* and the *Harshachariita*, was hitherto only known from a passage of a comment on the *Bhaktâmara-stotra*, quoted by Dr. F. Hall.]—Bengali Folk-lore: a Legend from Dinajpur; by G. H. Damant.—On the Râmâyâna; by Prof. A. Weber.

[Translated from the German, as published in 1870.]—Correspondence, Notes, and Queries.—The Srîrangam Jewels.—The late Professor Goldstücker; by C. Mather.

Calcutta Review, January.—Notes on the Arabic Language. [Tries to show a radical connection between the Aryan and Semitic languages, by comparing Arabic with English words!]—The Architecture of Kashmir; by F. S. Growse. [A brief but useful account of the various temples of Kashmir, their probable date and history, style of architecture, &c.]—The Revision of the N. W. P. Settlements.—Elementary Education in Madras.—Benoudha. [The writer traces the history of that portion of Oudh, principally availing himself of the writings of P. Carnegy (viz. *A Historical Sketch of Fyzabad Tehsil, including the former Capitals of Ajudhâ and Fyzabad*, 1870; *Notes on the Races, Tribes, and Castes inhabiting the Province of Oudh*, 1868; *Fyzabad Settlement Reports—Historical*), though other works, such as Sleeman's *Tour*, and Butler's *Southern Oudh*, are also used.]—The Income-Tax in India.—Reminiscences of Ava; by J. T. Wheeler. [Recollections, personal and political, of Mr. R. S. Edwards, late Collector of Customs at Rangoon, who was born (in 1802) and educated at Madras, and was sent, in 1819, to the Straits Settlement to be a clerk in the office of the Superintendent of Wellesley. In 1825 he proceeded to Tenasserim, where he witnessed the outbreak at Tavoy, under Moung-dah, in 1829. In 1839 and following years he was the principal medium of communication between the English Residency and the Court of Ava.]—The Bengal Commissariat.—Topics of the Quarter (Land Revenue, &c. and Education in Bengal).—Brief Notices of Vernacular and Anglo-Indian publications. [W. C. Benet's *Report on the Family History of the Chief Clans of the Roy Bareily District*; M. Müller's *Classical Studies in India*; J. Westland's *Report on the District of Jessore, its Antiquities, History, and Commerce*; W. Oldham's *Historical and Statistical Memoir of the Ghazipur District*; C. E. Gover's *Folk-songs of Southern India*; J. Garrett's *Classical Dictionary of India, illustrative of the Mythology, Philosophy, Antiquities, Arts, Manners, Customs, &c. of the Hindus*; Prâtâpa Chandra Ghosha's *Dîrgât Pilâj*, &c.]

New Publications.

- ASTON, W. G. A Grammar of the Japanese Written Language; with a Chrestomathy. London: Printed at the Office of the *Phœnix*.
- BECKHAUS. Xenophon der Jüngere u. Isokrates od. über die unechten Schriften Xenophons u. die Hellenika. Berlin: Calvary.
- DINTER, Bernh. Satura Grammatica (Stellen aus Cäsar, Sallust u. Horaz behandelnd). Grimm: Hering. (Teubner.)
- GOETSCHKE, C. Adnotations Sophocleae. Agitur de Oed. Col. vv. 1044–1058. Berlin: Calvary.
- GRIMM, J. W. Deutsches Wörterbuch. Fortgesetzt v. R. Hildebrand u. K. Weigand. 4. Bd. 5. Lfg. Leipzig: Hirzel.
- HAUPT, M. Variarum Lectionum capita VII. Berlin: Calvary.
- HEITZ, E. Die öffentlichen Bibliotheken der Schweiz im J. 1868. (French and German.) Basel: Schweighäuser.
- HUBSCHMANN, H. Ein zoroastrisches Lied m. Rücksicht auf d. Tradition übers. u. erkl. München: Ackermann.
- NORRIS, C. Assyrian Dictionary. Vol. III. Williams and Norgate.
- OPPERT, J. Mélanges perses. Paris.
- PARIS, Gaston, et PANNIER, L. La Vie de saint Alexis, poème du xième siècle, et renouvellements des xiième, xiiième, et xivème siècles, publiés avec préface, variautés, notes et glossaires. 7ème fascicule de l'École des hautes études. Paris: Lib. Franck.
- PRÆTORIUS, F. Beiträge zur Erklärung der Himjarischen Inschriften. Halle: B. des Waisenhauses.
- PÜSCHEL. Li roman de la rose. Première partie. Par G. de Lorris. Berlin: Calvary.
- RASMUS, E. De Plutarchi Libro, qui inscribitur di communibus notiis commentatio. Berlin: Calvary.
- SCHNEIDER, P. De Elocutione Hesiodea commentatio. Pars I. Berlin: Calvary.
- SUSEMIHL, F. De Politicis Aristoteleis quaestionum criticarum particula IV. Berlin: Calvary.
- VERGILIUS P. MARO's Georgica, hrsg. u. erkl. v. Dr. E. Gläser: mit einer Einleitung. Halle: B. des Waisenhauses.

ERRATA IN NO. 47.

- Page 164 (5), line 40, for "Sturm und Drang" read "Slurm und Draag."
 .. 164 (5), 9 lines from bottom, for "Dutmar" read "Dülmén."
 .. 167, line 4 of *Intelligence*, for "best" read "least."

THE ACADEMY.

"INTER SILVAS ACADEMI QUARRERE VERUM."

Vol. III.—No. 49.

Readers are reminded that the mention of New Books, Articles, &c., in our lists is intended as a guarantee of their importance. The Editor of THE ACADEMY cannot undertake to return communications which are not asked for. The next number will be published on Saturday, June 15, and Advertisements should be sent in by June 11.

General Literature.

Sanct Brandan. Ein lateinischer und drei deutsche Texte. Herausgegeben von Dr. Carl Schröder. Erlangen : Eduard Besold, 1871. *Bibliothek van Middelnederlandsche Letterkunde, onder Redactie van Mr. H. E. Moltzer, Hoogleraar te Groningen.* Sixth Part. Groningen : Wolters, 1871.

THE subject of the two publications before us is one of the most widely spread legends of the middle ages, and is also to be met with in two old English versions, one in verse and the other in prose, edited by Thomas Wright (*St. Brandan*, London, 1844, Percy Society). It is to be found in French and Spanish, was known in Italy, and formed everywhere the favourite reading both of monks and the widest secular circles. Even so late as in 1721 expeditions were undertaken in search of the island paradise reached by the saint in the course of his wanderings by sea and through hell and purgatory. According to the Spaniards, the island of "San Borondon" was the sojourn of King Roderick, who was overcome in battle by the Moors. According to the Portuguese, their king Sebastian was still living there, after having been in like manner vanquished by the Arabians in the battle of Alcasyarquivir. It is probable, too, that the island of Avallon, where King Arthur, according to the English belief of the middle ages, was supposed to be still alive, was the same Brandan's isle, in so far, that is, as the legend rested on the ancient conception of an island lying in the western sea, which according to the heathen faith was the abiding place of the blessed, and to later Christian fancy contained the earthly paradise, where, for instance, Elijah and Enoch still live on. Even yet the belief is not quite extinct, as the Irish idea of the island *Hi Breasal* shows ; and this is the same, I think, as that reached by the Irish monks in their miraculous voyage, in Geoffrey of Viterbo (p. 78, ff.; cf. *Acta SS.*, June 2, 184). Again it is related, in an Irish MS. of the seventh century or earlier, at the Royal Library of Stockholm, how an Irish chief once found on a tree near his castle a golden bough, covered with flowers of gold and precious stones. He broke it off and took it with him to the castle, and while every one was admiring it, a beautiful woman came forward and claimed the precious object, maintaining that it came from an island where such branches grew commonly, and where men never grew old. She advised the chief to fit out a vessel and to sail with her for that island, which he did in a ship manned by thrice nine sailors. They reached the island and stayed there some time, and were so happy that the days went by without their knowing how. At last their leader returned to Ireland, but no one knew him any more, for he had been away more than a hundred years. (See G. Stephens, *Förteckning öfver de förmästa Brittiska och Fransyska Handskrifterne uti Kongl. Bibliotheket i Stockholm*, Stockholm, 1847, pp. 18, 19.)

A similar popular belief still exists in Norway concerning VOL. III.—NO. 49.

the island *Udröst*, which people reach sometimes by chance, but never when they seek it. The legend is admirably related in Asbjörnsen's *Norske Huldre-Eventyr og Folkesagn*, 3rd ed., Christiania, 1870, "Skarvene fra Udröst." But to return to St. Brandan ; all the versions hitherto noticed, including the English ones, as Schröder maintains against Wright, are traceable to a Latin prose legend, which they all follow. In this Latin legend there are two elements which must be distinguished ; namely, a national mythological foundation, and a universal Christian legendary superstructure resting on the first and giving it a special ecclesiastical colouring. On the other hand, there were, in the thirteenth century, many other forms of the legend, which depart materially from the Latin text, by additions and amplifications, besides abandoning much of the specifically monastic spirit and arrangement which characterize even its fictions. In exchange they introduce something of the new spirit which took possession of Europe during the Crusades ; something of the delight in huge deeds of arms, in extravagant wonders and miracles, in strange, new, exciting tales, of which Gervinus speaks. The Old-German texts here published by Schröder represent the latest form of the legend, and contain half ascetic, half heroic sea voyages, in common with other contemporary poems, such as *Oswald und Orendel*; while from another, *Herzog Ernst*, it borrows various wonders which take the place of details from the earlier Latin outline, which it omits, or more or less considerably modifies. The contrast between the two versions appears from the first, as Schröder observes. In the Latin text Brandan is induced by the narration of Barinthus, who had been privileged to see the *Terra reprobationis sanctorum*, to set forth in search of the fortunate island ; after seven years' wandering, he finds it, and then returns home. In the German version, on the other hand, Brandan is introduced as suddenly seized with doubts as to the marvels related in a book he is reading, and, cursing the poet, he burns the book. As a punishment for this he is condemned to wander over seas for nine years, to see with his own eyes the things which he had refused to believe, and to write down the account of them for an everlasting remembrance. He is not pardoned and allowed to return till the book of his adventures is finished, and the loss of the work he had rashly burnt in some sort made good.

Of the three German texts, two are in rhyme, and of these the first, in Middle High German (in 1934 verses), which has not been printed before, belongs probably to the end of the twelfth century. The second is an abridged, or rather a mutilated, Low German translation of the other, in 1165 verses, of uncertain date, published once before, but very defectively. The last is a prose paraphrase of the first poem, dating from the fifteenth century, which had been printed as a chapbook no fewer than thirteen times before 1521. Besides these Schröder also gives the Latin legend, to enable the reader to estimate the relation between it and the German version, as Jubinal's edition (Paris, 1836) was badly printed, in only a small number of copies, and from a bad MS. In addition to its critical merits, Schröder's work is recommended by an instructive introduction and remarks, only however intended for the learned, on points of language and matter. From these I will only quote two passages, which show that even in the middle ages doubts had emerged respecting the authenticity of St. Brandan's travels, since Vincentius Bellovacensis, in his *Speculum Historiale*, observes, "Hujus autem peregrinationis historiam propter apocrita quedam deliramenta que in ea videntur contineri, ab opere isto resecavi." The other passage occurs in a satirical poem, describing the drunken monks of the Scottish convent at Erfurt, but it also shows in what high regard Brandan was held, at least by the Scotch :—

"Sunt et ibi Scotti, qui cum fuerint bene poti
Sanctum Brandanum proclamant esse decanum
In grege sanctorum, vel quod deus ipse deorum
Brandani frater sit et ejus Brigida mater.
Sed vulgus miserum non credens hoc esse verum
Estimat insanos Scotos simul atque profanos
Talia dicentes. Accedant scire violentes,
Ex evangelico textu probo quod tibi dico :
Qui non delinquit, sed qui perficerit, inquit,
Velle mei patris, illum voco nomine fratris.
Immo meus frater est et soror et mea mater.
Sic sancti quique, qui regnant hic et ubique,
Et possunt fratres simul et Christi fore matres,
Si non ignores, et possunt esse sorores.
Sic Brigidam matrem, Brandanum dicite patrem,
Nam perfecerunt, quecumque deo placuerunt."

Besides the texts published by Schröder, and belonging to the group which departs from the Latin form, is a Middle Dutch version, published formerly by van Blommaert, and now reprinted by Professor Moltzer as part of the above-mentioned *Bibliothek*, of which the object is to familiarise the general public with the ancient literature of the Netherlands. Its productions appear in this collection under the learned direction of the professor, and with the co-operation of other distinguished proficients in that literature, such as Professors Bisschopp, Brill, Hermans, Jonckbloet, Verwijs, and de Vries. As in the *Deutschen Classikern des Mittelalters* (which I shall notice in the *Academy* shortly), the texts are provided with ample notes for the instruction of the general public, but the introductions contain nothing but what is rigorously indispensable. Opinions vary as to the original source of *Sinte Brandaen*; the learned editor regards in this light some possible French version, and assigns the Dutch poem to the thirteenth century, while Jonckbloet and Schröder believe it to have been translated from the Middle High German in the twelfth century—a view which Professor Moltzer will probably share after the appearance of the Middle High German poem. It is true that the Dutch text is fuller than the German (it contains 2284 verses), but it contains nothing peculiar to itself, though in one place it serves to supply a seeming gap in the German text, and it also contains an interpolation (v. 137–260) which is entirely wanting in all German copies. I will only allow myself a few remarks on the notes, in which almost every serious difficulty is satisfactorily met. On v. 184–194, where Brandan sometimes addresses the death's head as "thou," sometimes as "you," the editor observes, "This is a piece of carelessness either of the copyist or the author." But it is not so, for the change from the singular to the plural in addressing the same person is met with elsewhere, not only in Flemish, but also in German, English, Danish, Icelandic, French, Provençal, Italian, and Portuguese, especially in the older poems, as I pointed out in the *Gött. gel. Anz.*, 1866, p. 1038; 1870, p. 1232; and 1872, p. 318. Accordingly in the poem before us, *di*, v. 1248; *ghi*, v. 1254; *saechdine*, v. 1894; and *suldij*, v. 1913, are right, and should not be altered. On v. 314, *om hout dat si ghingen*, it is observed that *dat* is superfluous; the same may be said of many other passages, e.g. v. 322, 1522, 1524, &c.; cf. Borman's *Leven van Sinte Christina de Wonderbare*, Gent, 1850, pp. 149, 279. V. 615, *daer verbeide ic dat ghescline*: *wille*, does not make good sense, as the learned editor rightly remarks. The corresponding line in the Middle High German poem (v. 419) runs, *biz das weter wirt stille*: *wille*; which shows that the reading of the other manuscript, *daer verbeide ic dat ghestille*, is right—*ghestille* being here not a substantive but an intransitive verb, so that *dat ghestille* will mean the same as *dat het wordt stille*. V. 907, *Waric niet een droghenare*, is not quite right according to Professor Moltzer, as, if *niet* were correct, the negative *en* should precede it, besides which Brandan would not declare

himself a deceiver. But *en* as a double negative is common in Middle High German, and there are other traces, as the editor himself notices, of Germanism in the Dutch poem; while for Brandan to call himself a deceiver is only a consequence of his extreme humility. The corresponding passage in the German poem runs quite differently. V. 1155–6, *Die storem wart arde groet—Die see borlede ende scoot*: this is not sense, says Professor Moltzer, and wishes to read *woot* instead of *scoot*. Yet *scoot* may be here the imperfect of *scieten* (*schieten*), in an intransitive sense, as in Old and New German *schiezen*, *schiessen*, may mean, "to move as fast as a shot": the German poem has (l. 825–6), *ein wester wint hâb sich vil grôz—von dem das mer sêre irdoz*.

These remarks, scanty as they are, will serve to show that I have read the Dutch poem carefully through, and can therefore confidently recommend the whole collection to which it belongs to those who wish to acquaint themselves with the Old Dutch literature without difficulty or fatigue.

FELIX LIEBRECHT.

The Life and Letters of St. Francis Xavier. By Henry James Coleridge, of the Society of Jesus. Volume the First. Burns and Oates.

FRANCIS XAVIER is one of the very few saints canonised since the sixteenth century whom the world has agreed to recognise: it is superfluous to seek very far for the reason of the recognition. His self-devotion was too astounding not to be conspicuous, and, like St. Vincent de Paul, he was devoted to a cause which it was, to say the least, respectable to patronise. We have gone on admiring him with so little knowledge that really Mr. Venn might almost find some excuse in our ignorance for treating his reputation as a bubble that would burst when touched. Of course, in one sense the main facts of Xavier's life are known, but this is only another reason for gratitude to a writer with the qualifications of Father Coleridge, who makes it his "chief object to draw out the character of St. Francis Xavier from his own words and actions." Perhaps in one way he is almost too well qualified: more than once he seems to write like a man who is filling up an outline which is present to his own mind, while it has hardly been impressed on ours. Still the story is given more completely and more coherently than it has been given in English at any rate before, and the process of fitting the letters into biographies which were not written from them has been got over in spite of difficulties which would be worth referring to in future editions of the *Horae Paulinae*. These difficulties, though real enough, are not so obtrusive as to affect any but the attentive student: the ordinary reader will take more interest in the tact which elucidates comparatively isolated points. For instance, the aid which Xavier received from Loyola becomes intelligible when we are reminded that a young noble from Navarre, who wished to be respected in Paris as he had been respected at home, would soon find the sums which friends in Navarre might think it sufficient to send very insufficient for wants which he might easily think legitimate. Whether we admire Xavier's sacrifice in passing his home without a farewell, or are content to respect what is outside our sympathies, it is a relief to know that he could not have been expected, and that therefore the sharpest pain at any rate fell upon himself alone. Nor has any writer before given so much prominence to a fact which explains and justifies the wholesale baptisms in which Catholic writers have been too prone to find matter for boasting, as Protestant writers have been too prone to seek matter for apology. Neither is in place when we remember that Xavier was always specially drawn to neglected populations of native

Christians whose religion was little more than a name to which they were sincerely attached.

It is always difficult to describe the character of the saints—their habitual thoughts are so far from ours; and since the world has become self-conscious, their self-suppression has become more deliberately impenetrable. We certainly know even less of Xavier and of Loyola than of Francis of Assisi and of Bernard of Clairvaux. Almost all that outsiders can hope to ascertain about a man like Xavier is the point at which he started and the direction in which he moved, to become the unknown being that he was. We are struck at once by a singular union of sweet radiant impetuosity, like what we might imagine for the saintliness of a Shelley, with the most patient common sense and the most generous candour.

From first to last his sense of the obligations of his religion was so keen and eager that he was always pressing them upon others to the verge of exactingness, and yet he is always spontaneously exuberant in his thankfulness for even the cheapest and easiest approximations to his standard. Another contrast suggests itself, and will hardly be repelled, Xavier's power of organization was on the same heroic level as his devotion to personal labours; but anything like sustained opposition invariably drove him to break up new ground. The charm of his charity and gracefulness was immense; there were not many who were obstinate enough to resist it when it was brought to bear upon them, and the multitudes who passed under his ascendancy received a deep and powerful impulse towards good. But a person who could hold out against Xavier for six months could baffle him for ever; and in this way the very magnitude of his success became the source of his severest disappointments. In a few months he could achieve results which another man would have hardly dared to anticipate from the labours of a life, and then he had to watch the steady persistent working of hostile forces in a struggle which seemed hopeless because he was helpless. His work was in reality for the most part exceedingly solid; but its immense and interrupted promise was always tormenting him with the impression that it was illusory. And whatever they may have been for India and for the world, we can hardly doubt that the immense diplomatic and ecclesiastical powers which he received from the king of Portugal and the pope were a heavy misfortune to himself. After his first year in India the duties in which they involved him compelled him to withdraw more and more from preaching and baptizing from village to village—the only work in which he could really find consolation for his immense privations. Sometimes the consolation, like the suffering, was almost too much for flesh and blood—the joy in the good of which he was the instrument was too intense for earth; sometimes he longed for martyrdom to release him from a world where he felt useless; once, at least, he felt the saying—"He that will save his life shall lose it, and he that will lose his life for my sake shall find it"—hard and obscure. Perhaps the last mood is really the highest. We seem, taking the three together, to catch an echo within the limits of humanity of "I beheld Satan as lightning fall from heaven"—"I have a baptism to be baptized with, and how am I straitened till it be accomplished?"—"Now is my soul exceeding sorrowful even unto death, and what shall I say?"

Father Coleridge keeps the miracles with which the life of Xavier abounds as much in the background as is possible for a writer who delights in them and believes in them. It is, perhaps, a wise discretion; in a sense, it is keeping them in their natural place, in the place they had in the saint's own mind. If any man had the gift of miracles, it seems that Xavier had it, but he hardly thought of it; virtue went

out of him almost without his knowing. It is almost like an impertinence to pretend to know more about it than he knew himself. We may leave the question of his miracles altogether and hardly know less of him. And though he lived in the full daylight of history, and though his miracles are attested by sworn eye-witnesses, they throw less light on the general question of the miraculous than the wonders attributed to St. Martin, who could be pained by the sense of diminished power, or those attributed to the Curé d'Ans, who had the opportunity of cultivating the spirit of Christian sobriety to a very high degree within the whole of his immediate circle. We have no security that the sworn eye-witnesses could be trusted without cross-examination, or that they were cross-examined, or even that they were not asked leading questions by men who had been directed to them as in a position to verify the wonderful rumours that were in the air. Whenever we hear of raising the dead, it is natural to think of suspended animation, especially in India, where a Faqir submitted with impunity under tests devised by Europeans to be buried alive for a whole month. In a country where our own officers have been spontaneously deified, and might, if they had pleased, have exercised the gift of healing as freely as Charles II. or Vespasian, it is not wonderful that many should have believed they were benefited by the supernatural powers that it was so easy for them to attribute to a man who led the life of Xavier. Nor is the evidence of the Portuguese of a kind to dispel these uncertainties. They were hardly on the intellectual level of the Pilgrim Fathers, and the example of the Pilgrim Fathers proves that a sudden change of conditions enormously exalts the susceptibility to supernatural beliefs, and proves it so clearly that no one has thought it worth while to enquire whether it may not revive a susceptibility to supernatural influences. With this drawback the stories of Xavier's predictions stand on the same level as the most puzzling stories of clairvoyance, though, if the facts were established, it would be natural and legitimate to refer them to Grace in him and to nature in somnambulists. And this reflection applies to another class of wonders, for which even the evidence of Xavier's converts might be received, unless indeed it shall be established *a priori* that all wonders are impossible. It is well known that in certain conditions of nervous exaltation persons have been known to make coherent use of languages in which, in their normal state, they could not frame a single sentence. Such exaltation would be supernatural if it were produced by spiritual causes. Again, it is not hard for persons with great excitement to translate any sound into articulate words. There seem to be instances of a powerful personality impressing its own thoughts immediately upon others; this power, too, might be supernatural in respect of its source. Under such exaltation Xavier might preach in a language he had not learnt; by possessing such a power over thought, he might be heard to preach in several languages at once. However, without affirming that he had the gift of tongues, or denying that he raised the dead, we may say that his miracles, if he wrought any, serve rather for edification than for controversy. Indeed, until the processes of his canonisation are accessible, controversy about them is beating the air.

The volume is the first of a quarterly series of a sufficiently miscellaneous character which is to be conducted by the editors of *The Month*. Among its minor attractions we may mention the Spanish sonnet, attributed to Loyola, which is the original of the beautiful Latin lines which have become familiar as Xavier's. Father Coleridge appends another very inferior Latin version, and the half forgotten couplets of Dryden as the standard English rendering.

LITERARY NOTES.

The first number of a magazine entitled *Atsunie gusa*, and intended, in the words of the editor, M. Turrettini, "pour servir à la connaissance de l'extrême Orient," has reached us from Geneva. In the preface we are told that its pages are to be more especially devoted to popularising in Europe the literature of China and Japan, and as a first step towards carrying out this object, M. Turrettini gives us in the number before us a translation from his own pen of the first chapter of the well-known Japanese romance *Heike monogatari*. The choice thus made is a good one, as not only is the *Heike monogatari* one of the most popular tales in Japan, but to European readers it presents a vivid picture of the state of Japanese society and government during the twelfth century. Literally translated, the title reads, "The History of the House of Hei." This is fairly descriptive of the contents of the work, which consists of an account of the struggles of the two great families of Gen and Hei for the supreme power, which, though nominally wielded by the Mikado, rested in reality in the hands of the Daimios. After the manner of feudal lords in all parts of the world, these nobles, each supported by his army of retainers, made war the one against the other, concluded peace, and usurped titles with barely so much as a reference to the official "fountain of all honour." M. Turrettini has, in some instances, missed the sense of the original, but, speaking generally, the translation is highly creditable to his knowledge of the language. We hope that he intends at some future period to complete the translation of the entire work.

In the *Revue des deux Mondes* (May 15), M. Louis Léger translates (with some abridgment) a story of village-life in Bohemia, by Mme. Svetla, whom her admirers and countrymen call the national George Sand, though in the specimen given the influence of Auerbach is at least as clearly visible.—M. Henri Delaborde invites the admirers of severe and conscientious art to visit the paintings of M. Édouard Bertin (the late owner of the *Journal des Débats*), at the Ecole des Beaux-Arts, where the generation which has grown up since he ceased to exhibit in 1854 will have the opportunity of appreciating his talent.

In the *Preussische Jahrbücher* for May, the son of Immanuel Bekker publishes some notes and reminiscences of the youth and early manhood of the eminent philologist. He was noted for a shy awkwardness and reserve in later life; but it is curious to find that, even in his own special field, an overscrupulous diffidence considerably delayed the appearance of his first works of independent research. The letters to and from Wolf printed in the article are of more personal than scientific interest.

The *Magdeburg Gazette* states that a new and complete edition of Herder's works has been undertaken by the Halle Orphan-house, under the patronage of the Prussian government. None of the German classics is so much in want of revision as the works of Herder, and none, as the *Gazette* remarks, would gain more in interest by a restoration of the original text.

In *Im Neuen Reich* (May 17) F. Gehring deplores the indifference of German musicians to the study of acoustics, and their neglect of Helmholtz's theory of musical sound.—The editor begins a series of papers based on the chronicles (printed fifteen years ago) of the Franciscan monk Salimbene, a lively and intelligent writer of the thirteenth century, who only believed in very well authenticated miracles, and tried to decipher "*cum cristallo*," an illegible inscription on S. Mary Magdalene's tomb (at Saint Maximin, near Toulon), before being convinced that it was too illegible not to be genuine.—A new literary annual, *Die Diaskuren*, is well spoken of; nearly all the popular *littérateurs* of Austria contribute to its pages.

We have just received a newspaper report of part of Professor Max Müller's opening lecture at Strassburg. The largest auditorium in the Schloss was filled to overflowing: and the professor as patriotic as German professors are just now, and a great deal more eloquent. He dwelt upon the importance of maintaining the old German simplicity of life in the face of the demoralising influences of money-making and luxury.

Art and Archaeology.

SUMMER EXHIBITION OF THE SOCIETY
OF FRENCH ARTISTS.

THE French school is passing at this moment through a critical phase, and this fact cannot but give rise to deep anxiety in the minds of all those to whom the interests of art are matter for serious concern. For standing, as this school does at the present moment, foremost in the world, whatever gravely affects its course must gravely affect the future of all. The signs of the time are evident; even this small exhibition affords ample food for illustration and comment. With little impertinence and much show of justice, one might boldly divide the contributors into two classes, viz. painters and scene painters. We have here the works of poets to whom colour, form, and line are the natural means of expression; we have here the work of those who give us the results of patient and profound study of the facts of nature; but we have here the work of those who, with well-calculated rough and ready handling, forcibly accentuate for us only our most obvious physical impressions. These men, the scene painters, are the young school. They have broken with tradition, and their work has that air of isolated effort which characterizes our century. They do much; better than it has ever been done before; they match tints with wonderful justness, but their colour is without refinement; they draw with daring certainty, but without delicacy; their composition is skilful, but without dignity; their technic is admirable for dash and command, but it is coarse. Whether such work is lovely and desirable in our eyes as art is not the question; setting aside personal predilections, the critic must endeavour to bring a trained and discriminating judgment to the appreciation of whatever matter presents itself. We cannot demand from Manet and Courbet expressive finish which is not in their intention, possibly not in their gift—what we have to estimate is the value of this terrible effectiveness which is an undoubted power in their hands. Small canvasses in a small room such as this do not indeed give us the opportunity of seeing such work on its favourable side. Its special excellences do not seem appropriate to the space and place, but they cannot therefore be ignored; they challenge us too boldly, they are too intelligible for that. What is likely to be the effect on taste of the production in art of work which corresponds in style to the style of the sensation writers in literature? It is evident that we are to be completely freed from the yoke of the Past, and thoroughly emancipated from tradition. Do we not run the risk of opening the door to all kinds of deceptive innovations, of substituting clever tricks for sound method, and of replacing the effort to instruct and train the eye by the mere desire of astonishing it? The true secrets of nature and art are only revealed to the patient, and those who cannot wait give us in all they do only the outside. One cannot but fear that this terrible effectiveness, so easy to understand, or, say rather, so impossible to misunderstand, which puts so forcibly to the eye the commonest, the most vulgar, the most salient facts, has from its very intelligibility a much to be dreaded seduction, and that it will to a great extent destroy any relish which may exist in the public for work of more subtle quality, which is less readily to be comprehended.

What can we have cleverer in its way, more vivid in presentation, than the green sea, the black ship, the dirty trail in the wake of the passing steamer, the frisk of the fish's tail, in Manet's "Dolphins"? Just the facts which the most untrained eye may take in in a couple of seconds. It is as clever and as forcible as Millais. Or, again, the brilliant trick of his "Bull-fight," or the bravado of his "Guitarplayer," or even the abominable ugliness of his "Christ in the Sepulchre." But this fresh slapdash destroys the eye for other work. Courbet's "Source of the Loue" is grandly conceived, and the relation of the slow entering gradations most skilfully managed; but it is difficult to turn from this, true as it is in a certain sense, and give full weight to the exquisite delicacy of tone and colour in Latârge's "Snowy Day," or the dreamy and somewhat monotonous refinements of Corot, of whose work "River Pasture" is a very fine example. "For this, for everything, we are out of tune; it moves us not." It requires even a certain effort before we can thoroughly enjoy the tolerably obvious artistic merit of Laurent Bouvier's "Spring," which is about the first picture which meets the eye

on entering. M. Bouvier has established a reputation by his decorative work, which he now sustains by the admirable drawing of the painting in question. As we might expect, "Spring" is treated decoratively. The figure rests in the branches of a blooming apple-tree, which forms the background, by an open network of branches interlacing over a sheet of tremulous blue sky. For a moment the motive reminds us of Hamon, but M. Bouvier has brought to the rendering greater force and positiveness, if less grace and sentiment than distinguishes Hamon's work. But of this force and positiveness comes a realistic treatment which, excellent in itself, yet hardly seems to accord with the ideal character of the motive. The head and expression have an ordinary character—they are those of the model unmodified, and the straightforward empty gaze disturbs the complete harmony of the impression. Yet "Spring" is a beautiful drawing, showing sound artistic feeling and much science. Close in its neighbourhood hang two of the four pictures contributed by J. F. Millet. The "Geesedriver" and (in respect of colour) even more beautiful "Shepherdess" are two poems from peasant life, in which subject and treatment are happily allied. The "Water Carrier" (a large work) afflicts us with the strange discrepancy between the sentimental grace and attraction of its tone and touch and the hideousness of the brutalised savage by these means placed before us. But everything which Millet does affords matter for study, for interest, for admiration. In "The Angelus," the most important both in size and subject of his four contributions, we find this delightful painter equal to himself, in colour, in sentiment, and in instinct for true finish and completeness. The suggestive exaltation of the woman's attitude makes her figure a poem in itself, of which the full charm and loveliness can only be realised by long looking. The lines of composition in Hemy's "Mending Nets" are noteworthy for their excellence. The figures are very insufficient. Amongst the landscapes, Rousseau's "Village on the Cliffs" is remarkable. The execution is wonderfully masterly, and the general effect has a noble truth of tone and feeling; every line and touch looks thoroughly felt. In "The Marsh," by Lansger, one recognises the sympathetic quality which the French prize in this young artist. Then Boudier's "Study at Fontainebleau" is very true and careful, and the rich colour of M. Dupré's "Pond" is attractive. A genuine sense of colour, too, is betrayed in Puvis de Chavanne's "White Rocks," but its power is marred by much wilful affectation—affected, too, which loses all grace, and becomes pure offence in such treatment of such a subject as we find in the "Decapitation of St. John." The fresh naturalness of Fantin's flowers ought not to be left without remark; they are almost rivals of the flowers of that prince of flower painters, Albrecht Dürer.

The sketch for the "Assassination of the Bishop of Liege," by Delacroix, recalls us to other days, days when the conflicting tendencies of the French school were resumed by the names of Ingres and Delacroix. Now all is changed. No man is carried to a supreme height by the collective effort of many. Modern society is developing the individual at the expense of the family, and in every field of human labour this is making itself felt. The school with its influence and its responsibility is at an end; and the risk of endeavour and the crime of failure must be borne by each artist at his own peril. E. F. S. PATTISON.

ART NOTES.

A very noteworthy exhibition of old masters is now open at Amsterdam. M.M. Six, van Loon, Pallandt, van Weede, van Dyckveld, have each lent a portion of their valuable collections. The catalogue enumerates nearly 350 chef-d'œuvres.

M. Jules Jacquemart has just finished a very fine medallion of Théophile Gautier, which will appear in the reprint of the volume *Émaux et Camées*, which is about to be published by Hachette.

There has been much talk in Paris as to the reported resignation of M. Lefuel, the architect attached to the Tuileries and Louvre. It was said that M. Lefuel, annoyed at having a young architect, M. Paschal, put upon him in the capacity of inspector, had sent in his resignation. It now appears that M. Paschal was added as assistant at the express request of M. Lefuel.

The "Sampson" of Michel Angelo is about to be removed from its place at one side of the entrance of the Palazzo Vecchio at Florence. It is found to be so seriously injured by the action of the weather that it is absolutely necessary to put it under cover.

M. Adolphe Moreau, the biographer of Decamps, is about to publish a work on *Eugène Delacroix et son Œuvre*.

Under the title, *Un Palais grec en Macédoine*, M. Léon Heuzey has just brought out the interesting work which last year he laid before the Academy of Inscriptions. The subject is an important edifice discovered by M. Heuzey at Palatitzia, the ground-plan of which he has been able, with the help of M. Daumet, the architect, to re-establish. Starting from this point, the learned archaeologist seeks to prove, by a number of ingenious arguments, that the building in question was a pnyx, serving probably at the same time as a palace for the kings of Macedon. The text is accompanied by an explanatory plan.

M. Brianchon, a well-known archaeologist, has just presented to the Musée de Sèvres some very interesting examples of ceramic. These are bricks of the Renaissance period which once decorated a house in the hamlet of Mare-Barbet (arrondissement of Havre). These bricks, representing masks, leafage, grotesques, fleurs-de-lis, medallions of men and women, inserted between the timbers of the façade of the building, are one of the rare specimens of pottery applied to the decorations of constructions in the sixteenth century. As has often happened on various occasions in ceramic, a potter seems to have cast the moulds for these bricks on some article of sculptured wood of the same date.

M. Jeanron, formerly director of the national museums of France and inspector of fine arts, has been named keeper of the archives of the School of Drawing and Mathematics.

The *Opinione* publishes a letter of Giustiniano Nicolucci, on the discovery in the Terra di Lavoro of a tomb dating from the Stone age. The letter goes into details: the writer says that the stone weapons found in this sepulchre are remarkable in point of workmanship, and denote talent and skill on the part of the workman who fashioned them.

M. Foucard, of Valenciennes, has recently presented to the Louvre a portrait of a man by Mabuse, signed, and dated 1524. It is in an excellent state of preservation.

The sale of twenty-five paintings from the collection of Mdme. Roell, née Hodshon, at Amsterdam last month realised 50,000 fr. "Pigs," by Potter, was sold to M. Oppenheim, 705*l.*; "A Landscape," by Hobbema, to M. Newenhuis, 4,125*l.*; "A Marine," Vandervelde, to Mr. Holloway, 3,712*l.* The Antwerp Museum bought a "Waterfall," by Ruysdael, for 2,275*l.*—On the 13th, six water-colour drawings, by T. M. Richardson, were sold by Christie and Manson for 838*l.*; and on the 16th, a magnificent collection of engravings after Sir Joshua Reynolds was also disposed of. Amongst the most remarkable were, "Mrs. Carnac," by Smith, 87 guineas; "Lady C. P. Clinton," by the same, 30 guineas; "Miss Horneck Doughty," by the same, 36 guineas; "Nelly O'Brian," by Dixon, 40 guineas; "Lady Spencer Dickinson," 46 guineas; the "Strawberry Girl," by Watson, 68 guineas; the "Marchioness of Tavistock," by Fisher, 51 guineas. A collection of Watteau's works was sold at the same time for 310 guineas. There were about 700 plates, making up 5 vols.—On May the 13th and 14th, a portion of the Allègre collection came to the hammer at the Hôtel Drouot. It is impossible for us to mention all the important articles of this most important sale, but here are a few:—Two plaques of gold, enamelled on both sides, one representing Charlemagne and St. Louis, the other Pierre II. de Bourbon sire de Beaujeu, and Anne de France, his wife, daughter of Louis XI. The workmanship is French, and dates from the fifteenth century. They formed part of the Debruge collection, and are cited by M. de Laborde in his *Notice sur* Digitized by Google

les Émaux du Louvre, p. 115. Bought by the Duke d'Aumale; 20,000 fr. Dessert spoon, knife, and fork, in gold, jasper handles covered with openwork ornament; belonged to Cardinal Mazarin; 10,300 fr. Two Chinese vases, in gold, chiselled in relief, set with pearls and other precious stones, from the Summer Palace; 25,200 fr. Bowl of rock-crystal, ornamented with three masks and arabesques of the most exquisite workmanship. It is of the very first period of the sixteenth century; was formerly in the collections of Louis and Edouard Fould. 18,900 fr.—The pictures, studies, curiosities, tapestries, &c. of Troyon's atelier will be sold shortly.—At the sale of Prince Napoleon, the portrait of Cosmo de' Medici, by Angiolo Bronzino, went for 325 guineas; a portrait by Vincenzo Foppa, 250 guineas; "A Girl at her Toilet," by Paris Bordone (from collection of Duke Litta of Milan), 700 guineas; "Portrait of a Youth," by Francesco Francia, 390 guineas; "Virgin and Child," signed Joannes Bellinus, 600 guineas. Two sixteenth-century statues—Bacchus and Venus—from collection of Duke Litta, 2,770/. A statue of Aeolus and a companion figure, from a fountain in the palace of the same nobleman, 1,260/. There were also a few fine pieces of majolica, one a bowl with the subject of Curtius leaping into the gulf in the Forum, attributed to Orazio Fontana, was sold for 125/. Two lustre dishes, one inscribed Fra Xanto, de Rovigo Urbino, 1532, the other, Fra X. R. 1536, went for 144/.

Mr. Cole sends us the following:—

"With a view to preserve accurate copies of the Cartoons of Raphael, the Lords of the Committee of Council on Education, acting through a committee, propose to select nine artists to make preliminary studies of given parts of three of the cartoons. Artists will first be required to complete an accurate copy either in water colours, tempera, or oil, of a photograph full size, of a head selected from the Beautiful Gate. These will be sent in to the secretary of the Science and Art Department by the 31st July 1872. From the candidates so competing, nine may be selected to make accurate coloured copies from the cartoons themselves of portions set out by the committee as a final test. Candidates will be allowed 2/- per week for not more than eight weeks to complete these copies, which will be the property of the Science and Art Department. If the competition prove satisfactory, a further selection of portions of the cartoons will be made to continue the work of reproduction."

New Publications.

- AHLWARDT, W. Bemerkungen über die Ästhetik der alten arabischen Gedichte, m. besond. Beziehg. auf die sechs Dichter. Greifswald : Bamberg.
- ARNOLD, MATTHEW. The Great Prophecy of Israel's Restoration (Isaiah xl.-lxvi.). Arranged and edited for Young Learners. Macmillan.
- COLVIN, S. Children in Italian and English Design. Seeley, Jackson, and Halliday.
- COMPARETTI, D., e D'ANCONA, A. Canti e Racconti del Popolo Italiano. Vol. III. Canti delle Province Meridionali. Turin : Loescher.
- DE MAZADE, C. Lamartine, sa vie littéraire et politique. Paris.
- DE MORGAN, A. A Budget of Paradoxes. Reprinted from the *Athenaeum*, with the Author's Additions. Longmans.
- EICHELKRAUT, F. Der Troubadour Folquet de Lunel. Berlin : Weber.
- GOLL, J. Anthologie české lyrky. Prag : Gregor u. Dattel.
- GRÄSSE, J. G. T. Beschreibender Catalog des königl. Grünen Gewölbes zu Dresden. Dresden : Zahn.
- GRIMMINGER, A. Mei' Derhoim. Gedichte in schwäbischer Mundart. Stuttgart : Cotta.
- HUNTER, W. W. Orissa ; or, the Vicissitudes of an Indian Province under Native and British Rule. 2 vols. Smith, Elder, and Co.
- KÖPKE, R. Kleine Schriften zur Geschichte, Politik u. Literatur. Hrsg. v. F. G. Kiessling. Berlin : Mittler.
- LÜBKE, W. Geschichte der deutschen Renaissance. 1^{te} Abth. Stuttgart : Ebner u. Seubert.
- MASKELL, W. Description of the Ivories Ancient and Medieval in the South Kensington Museum ; with Preface by Chapman and Hall.
- RADENHAUSEN. Isis. 4^{ter} Band. (Schluss.) Hamburg : Meissner.
- SHAKESPEARE'S HAMLET, PRINCE OF DENMARK. Ed., with Preface and Notes, by W. G. Clarke and W. Aldis Wright. (Clarendon Press Series.) Oxford.
- WAGNER, B. A. Christian Thomasius. Ein Beitrag zur Würdigung seiner Verdienste um die deutsche Literatur. Berlin : Weber.

Theology.

The Epistle of Barnabas. [Erklärung des Barnabasbriefes. Ein Anhang zu de Wette's Exegetischen Handbuch zum Neuen Testamente. Von J. G. Müller.] Leipzig, 1869.

THE title of this work is perhaps liable to some misconception. We might have inferred from it that the editor is disposed to assign to this Epistle a quasi-canonical position, such as that which it holds in Hilgenfeld's *Norum Testamentum extra Canonem receptum*: but in his introduction he is careful to explain that, by calling his work an appendix to de Wette's *Handbook to the New Testament*, he does not mean so much as this, pointing out that it differs in internal character from the Canonical Epistles, and that the instinct of the ancient church placed it on a lower level. He might have added to his other arguments the fact that the very witnesses commonly adduced to support its claims to canonical rank are adverse to these loftier pretensions. The *Codex Sinaiticus*, for instance, places it after the Apocalypse, and not with the Catholic Epistles, which would have been its proper position if regarded as a substantive part of the Canon: while Clement of Alexandria, who quotes it frequently and with respect, and even ascribes it to the "Apostle Barnabas," yet nevertheless on one occasion points out an error of fact into which the writer has fallen (*Pædag.* ii. 10).

In this work Müller has supplied a real want. Though the writings of the apostolic and subapostolic ages have been so carefully sifted of late, and reviews, monographs, and critical histories teem with materials ready to hand, yet no attempt had before been made to furnish a complete commentary on this remarkable work of early Christian antiquity. The edition of Coteler, though now nearly two centuries old, still supplied the best and fullest body of notes. This defect is now remedied. Müller's *Commentary* is complete in all directions; no sources of information are overlooked; no points of interest left untouched. It is quite the most useful storehouse of information in all that relates to this epistle.

On the whole the grammatical portion of the *Commentary* is the least successful. It is difficult to see, for instance, why time should be spent on explaining common grammatical constructions like δέ ήμα (p. 183) and ποιεῦ τινά τι (p. 192), while the very unusual order in c. 1, τῆς δωρεᾶς πνευματικῆς, passes without a word of remark (pp. 56, 122), as if the editor were unaware that the position of the epithet is anomalous. Again, in c. 1, ὑπὲρ τι καὶ καθ' ὑπερβολὴν ὑπερενθράνομαι, where he rightly defends the text against Hilgenfeld, he does not see that ὑπὲρ is used adverbially, as in 2 Cor. xi. 23, but renders ὑπὲρ τι "above anything," i.e. "above everything"—a sense which it could not possibly have in this connection. This want of grammatical insight again is seen in his treatment of a passage in c. 7, τὸν μὲν ἔνα ἐτιὰ τὸ θυσιαστήριον, τὸν δὲ ἔνα ἐπικατάρατον καὶ ὅτι τὸν ἐπικατάρατον ἐστεφανωμένον; where he rejects the obvious explanation (to which the context points) that the sentence is elliptical, and has recourse to the expedient of accusatives *absolute*; and where also for ὅτι he substitutes ὃ τι, which he translates "wherefore?" not seeing that ὅτι introduces a quotation.

Müller's estimate of the authorities for the text is on the whole just; but he occasionally makes slips which show that he is not treading on firm ground. Why, for instance, does he represent Tischendorf as saying that Κ was written by the scribe of B (p. 25), when in fact Tischendorf says that the New Testament of B was written by *one of the scribes of Κ*? Why does he assume that the corrector of Κ (Κ**) collated this Epistle with a MS. written by Pamphilus (p. 29), when the corrector's notice of the source of

his collation is confined to a definite portion of the Old Testament? What authority has he for stating that the Latin MS. belonged to the German monastery of "Corvey an der Weser" (p. 22), when the facts point to the French Corbey, near Amiens, as its locality? Why, lastly, does he describe two Florence MSS. as 7 and 21 (p. 22), their true designation being Plut. lvii. No. 7, and Plut. vii. No. 21, thus omitting the number of the bookcase, and mentioning only the number of the volume in the case? The former of these two MSS. should not have been mentioned at all, for it does not contain this Epistle. It is the celebrated Greek MS. from which Voss first published the Ignatian Epistles in their shorter form. The Epistle of Barnabas is found attached only to the longer form of these Epistles.

Inattention to this distinction has misled Müller on another point, which is important. Jerome inadvertently quotes a passage from the Epistle as if from Ignatius (*Adv. Pilag.* iii. 2). This father's knowledge of the earliest Christian writings is very superficial: he most frequently quotes them at second-hand through Origen or Eusebius; and in this particular instance he may have derived the quotation, which is very remarkable, from the treatise of the former *Against Celsus* (i. 63), giving it from memory, and carelessly substituting the wrong name. Müller however, following Menard, Hilgenfeld, and others, gives a different explanation of the error. The Ignatian Epistles are followed in the existing MSS. by the Epistle of Polycarp, and this by the Epistle of Barnabas: but in the archetype of these MSS. some leaves containing the end of Polycarp and the beginning of Barnabas were wanting, and the transcriber, not perceiving this, has copied on continuously, thus welding the two Epistles into one, and making nonsense at the juncture. These critics suppose that the MS. which Jerome used was already mutilated in this way, and that this was the occasion of his mistake. If Jerome had quoted Barnabas under the name of Polycarp, the explanation would have been plausible enough: but as he names Ignatius, it is quite inadequate. Moreover, the phenomena of the MSS. are entirely adverse to such a supposition. This sequence of Polycarp and Barnabas is connected only with the longer Greek of the Ignatian Epistles. With the shorter recension it is not found. And we cannot without great improbability assume that the Epistles of Ignatius were known to Jerome in this longer form.

The date of this Epistle is fully discussed by Müller in excurses (p. 105 sq. and p. 334 sq.) on the two passages on which the decision mainly depends. He arrives at the conclusion that it was written A.D. 119. The first of these passages (c. 4) points, as he allows, to the age of Vespasian; for the ten kings of the prophet Daniel, as there interpreted, can only be explained of the first ten Caesars. Yet he explains the second passage (c. 16), in which the writer discusses the prediction of Isaiah xl ix. 17, as if it referred to the hopes which Hadrian held out to the Jews that he would rebuild the temple. Thus he gets two different points of time in the two passages: and he can only reconcile the two by the lame expedient of supposing that in the first passage the writer refers to events which had occurred long before he wrote. This solution however is directly excluded by the words with which the interpretation of the prophecy is prefaced, τὸ τέλεον σκάνδαλον ἡγγικεν, and which confine the horizon to the immediate present. If so, the interpretation of the second passage must be wrong; and indeed the whole argument of the supposed Barnabas shows that he did not contemplate the re-erection of the temple, then recently destroyed, as a material structure, but referred to its rebuilding as a spiritual edifice, which was fulfilled in the rise of the Christian Church. Thus all contradiction between the two passages disappears.

It may seem captious to call attention to minor errors in a work on which so much labour has been expended, and which deserves the gratitude of all students of early Christian literature: but it must be regretted that this volume is disfigured by constant misprints; and in proper names such enormities as Usser, Coutelier, Delaroue, ought to have been avoided.

J. B. LIGHTFOOT.

Apocryphal Acts of the Apostles, edited from Syriac MSS. in the British Museum and other Libraries, by W. Wright, LL.D., Ph.D., &c. Vol. I. The Syriac Text. Vol. II. The English Translation. Williams and Norgate, 1871.

PROFESSOR WRIGHT, already known, in addition to his other works, by *Contributions to the Apocryphal Literature of the New Testament*, now favours us with a collection of *Apocryphal Acts of the Apostles*. Every fresh addition to our sources of information on so important a branch of early Christian literature must be cordially welcomed, for only a small part of the available material has yet been published. Of the text here brought together, some, such as the *Decease of John*, the *Acts of Andrew and Matthew*, the *History of Paul and Thecla*, and a large part of the *Acts of Thomas*, were already known in Greek; others, such as the part of the *Acts of Thomas* in which the Greek is deficient, and some sections of the *History of John*, only in Latin; while others, such as several more sections of the *History of John* and the *Acts of Philip in Carthage*, are now published for the first time.

The greater part of the *Apocryphal Acts of the Apostles* is no longer extant in the original form. With few exceptions they arose in Gnostic circles, and were composed with the object of presenting the mysterious doctrines of the Gnostics in a dress attractive to the people. These marvellous tales were read with avidity by the faithful, and the only impediment to the propagation of such teaching which the Catholic teachers could interpose was by putting forth of orthodox editions, in which the fascination of romance was retained, while the heretical doctrine was more or less carefully eliminated. To this circumstance it is due that considerable remains of the apocryphal literature have come down to our own time.

The texts which Professor Wright has now edited and translated belong without exception to the class of Catholic alterations of Gnostic writings, and the simple popular language in which they are written proves that in Christian Syria as elsewhere these narratives were designed for the people and not for theologians. They are also without exception translated from the Greek.

The story of the *Decease of John* (vol. ii. pp. 61-68) agrees almost verbally with the conclusion of the Greek *Acts of John* published by Tischendorf (pp. 272-276, Tisch.). Here and there however the Greek can be filled up from the Syriac. Thus in cap. 15 (p. 272, Tisch.), where, after πόσα ιδετε παρ' ὁφθαλμοῖς ὑμῶν, should be read ἀ τρούμασεν ὑμῖν, μηδὲ τούτοις τοῖς ὁφθαλμοῖς ἐωραμένα, μηδὲ ταύταις ταῖς ἀκοᾶς ἥκοντας; and in c. 22, after the words καὶ εἰτῶν, "Be thou with me, Jesus the Messiah our Lord. Then he went down into the trench, where he had spread his clothes, and saying . . ." (vol. ii. p. 67). The genuineness of the latter passage is also shown by the Latin text in Abdias, *Histor. Apost.* v. 23. In other places words which are found in the Greek are wanting in the Syriac, e.g. c. 18, end, in the prayer of consecration, and just after, c. 19 (p. 63, foll. Wright), where in the Syriac, as was the case in Abdias, the direction of the apostle to dig his grave follows directly upon the Eucharistic feast. The disciple of John, who receives this command, is called Byrrhus, as in Abdias (the Greek

text has Εὐτυχῆς ὁ καὶ Οἰνῆπος). Other variations from the Greek arise partly from other readings, partly from the inexactness of the translation. On the whole the Syriac represents a text which is much more closely allied to that edited by Tischendorf than to the Latin of Abdias.

The *History of Andrew and Matthew* (not Matthias) in the *City of Cannibals* (vol. ii. pp. 93–115) and the *History of Thecla* (pp. 116–145) agree in all essential points with the Greek text. Here and there the translation is inexact and paraphrastic; in some places the Syriac gives only extracts. For instance, it omits capp. 12–15 of the Greek text of the *History of Andrew and Matthew*; in c. 10 and 18 a few sentences are transposed; in c. 10, 20, 27, 29, the Greek text is shortened; oftener still, shorter sentences are omitted; and sometimes the text from which the translation was made seems to have differed from that of our Greek MSS. (c. 24, end, c. 26, 27, 28, 31). Additions are rare (c. 30, 32, 33), but several passages of the Greek may be filled up or corrected from the Syriac. Thus, in c. 19, after ἐπιστεύθημεν, insert, “For if thou didst utter them, heaven and earth would tremble” (vol. ii. p. 103); in c. 23, instead of ἀλλὰ ἀπολυθῆναι τὰς μαχαίρας ἐκ τῶν χειρῶν τῶν δημίων, the Syriac has, “Let their heads be paralysed, and let the knives fall and melt like wax before the fire” (p. 108). In c. 28 (p. 111), instead of τότε ὁ Ἰησοῦς εἶπε τῷ Ἀνδρέᾳ, the Syriac has, “And when he had said these things, a voice came to him in Hebrew, saying . . .” It is noteworthy, that the city of cannibals is twice called Medinat-Kalbin, which Dr. Wright renders “City of Dogs;” at the close of the story, the words “which is Irkā” are added. Prof. Nöldeke conjectures that either the city of the Chalybis or Colchis is meant; he considers the identification of the cannibal-city with Irkā, i. e. Arka in Lebanon, to be the malicious jest of a copyist.

The gain for textual criticism is more definite in the *Acts of Paul and Thecla*, in many parts of which the Greek text may be supplemented to a greater or less extent from the Syriac. This is the case with the beatitudes in c. 5 (vol. ii. p. 118, foll.); in c. 8, where the Syriac inserts the sentence “And Thamyris answered . . . see her” (p. 120); in c. 19, 20, 27–29, 33, where the Syriac text is fuller (pp. 126, 131, 135, &c.); and in other passages. Demas and Hermogenes are here described as coppersmiths (pp. 116, 124, cp. 2 Tim. iv. 14), and Tryphaena almost always (but only once in the Greek, c. 36) as queen.

Omissions in the Syriac of words or sentences extant in the Greek text are rare. In c. 2 the name of Lectra, in c. 28, foll. that of Falconilla, is wanting, and the sons of Onesiphorus, Silas and Zeno, are converted into sons of Simon, though in one passage (p. 117, top) Zeno is distinguished from them; comp. also capp. 14, 43. On the other hand paraphrastic readings occur frequently (c. 26, 28, 37, 41, &c.). The conclusion from cap. 44 onwards is omitted.

Greater importance, however, attaches to the *Acts of John in Ephesus* (pp. 3–60), and the *Acts of Philip in Carthage* (pp. 69–92). The latter was previously quite unknown; the former only known in fragments. It is true that a narrative which bears the name of Prochorus is extant in Latin, and in an incomplete form in Greek. But though it resembles our Syriac narrative in beginning with the separation of the Apostles, and the first acts of John in Ephesus, the greater part of it is occupied with the miracles of the apostle in Patmos. There is also a part of the Ephesian narratives to be found in Abdias, and in the so-called Mellitus (Melito). The Syriac text published by Dr. Wright, which also bears the title *Doctrina Johannis* (p. 60), claims for its author Eusebius, the church-historian, who is said to have “found

it in a Greek book” (p. 3). In another place the author mentions as his authorities the books in the archives of Nero (p. 9). The narrative begins with the separation of the apostles, and relates how St. John hires himself out as a servant with a bath-keeper, raises the son of the procurator who had died by a divine judgment in the bath, converts the procurator and the nobles and a great multitude, and at last even the priests of Artemis, and procures the fall of the idol. The name of the procurator is Tyrannus, and is obviously borrowed from Acts xix. 9. The fall of the image of Artemis, however, is told quite otherwise by Prochorus, Mellitus, and Abdias; the last mentioned also speaks of the resurrection of a profligate youth, but under quite different circumstances. On the other hand, the remaining narratives, which are given by Mellitus and Abdias, are wanting in the Syriac. The banishment of St. John is here placed, not under Domitian, but under Nero; a fearful vision compels the emperor to recall his command, on which the apostle passes the rest of his life unmolested in his cottage near the former temple of Artemis, and at last, at the wish of Peter and Paul, who visit him in Ephesus, composes his Gospel. It is worth while to notice the chronological statements as to the age of John, who is said (p. 59) to have lived 120 years, and the duration of the ministry of Christ (p. 15), which is reckoned at something over two years, from the 30th to the beginning of the 33rd year of his age. This calculation varies equally from the earlier chronology, and from that which has prevailed since Eusebius, and seems to have arisen independently out of the fourth Gospel. It does not, however, follow that the present text of the *Acts of John* is older than Eusebius; in fact, he is well acquainted with the full Christological formulas of the fourth century. The conception of Christ took place, according to our author, through the ear of Mary (pp. 7, 14, &c.), an opinion which was afterwards sanctioned by the Catholic tradition, and popularised by painting, and which doubtless appears here for the first time. The name *Doctrina Johannis* is justified by the long speeches and sermons which are put into the mouth of the apostle. The contents are of a sound Catholic tendency, the last vestiges of Gnosticism being effaced; such a phrase as “the children of the left hand” (p. 4) is perhaps the only one which reminds us of the Gnostic περίοδοι Ιωάννου. This circumstance, as well as the large number of the still extant and very various reproductions of the *Acta Johannis* in a Catholic sense, seem to show that the histories of this apostle were read by the Catholics with especial diligence.

Of the old περίοδοι Φιλίππων we possessed up to this time four separate fragments, the *Acts* of the apostle in Scythia (in Abdias and Symeon Metaphrastes), those in Greece (in Greek, see Tischendorf, p. 95, foll.), and two narratives, the scene of which is laid in Hierapolis, the one preserved in the great *Menaia* of the Greeks, the other, with the *Martyrium* of the apostle, in Greek (Tischendorf, p. 75, foll.) and Latin (*Acta Sanctorum*, May 1).

The last mentioned passage is distinguished in the Greek text by the heading ἄπο πράξεως πεντεκαιδεκάτης μέχρι τελούς, ἐν αἷς τὸ μαρτύριον. A new portion of the πράξειs hitherto missing has now been discovered in Syriac; it seems to have formed the commencement of the narrative. It relates the journey of the apostle from Jerusalem to Samaria and Caesarea, his marvellously quick voyage to Carthage, during which he converts the Jew Ananias, the sermon and murder of the latter in the synagogue at Carthage, with his resuscitation by Philip, and the final expulsion of the unbelieving Jews. That the περίοδοι Φιλίππων consisted in great measure of controversy with the Jews; this is confirmed by the *Acta Philippi in Hellade*, and the history which it contains

of the unbelieving high-priest. The conclusion of the Syriac acts, however, reveals a comparatively mild disposition towards the Jews. It represents the Carthaginian Jews, guilty as they were of unbelief, of murder and perjury, as spared further punishment, because the Jewish law of retaliation was abolished in Christianity. Not less remarkable is the chronological notice on p. 78, that the devil had been expelled from Carthage after having sat on his throne for 3795 years. As Prof. v. Gutschmid has pointed out to me, the year 3795 is, according to the ordinary Jewish era, the year from autumn 33 to autumn 34 A.D., i.e. the first or one of the first years after the Crucifixion. This, then, is the first known instance of the use of the Jewish era of the Creation, which has been commonly supposed to have arisen in the middle of the fourth century. The document from which this notice is taken, and which forms the basis of our Acts, cannot, it is true, be older, but is apparently at least not younger than the third century. Besides, the use of the Jewish era is not the only indication of the Jewish culture of the author. It is corroborated by the special interest which he takes in the Jewish people, and still more by the remarkable collection of Jewish traditions about the Old Testament prophets (pp. 83, 84). The original Gnostic character of this as well as other narratives is clear from the nature of the miraculous stories they contain, e.g. those of the miraculously swift voyage, a detail which recurs in the *Acts of Thomas and Andrew*, of the mysterious apparition of the body of the murdered Ananias, and of the speaking and miracle-working oxen.

But the most valuable part of this new collection is formed by the *Acts of Thomas*, which are given here in a much more complete form than in the Greek. The book is divided into nine acts. The first three, the fifth and sixth, correspond to the Greek acts edited by Thilo and Tischendorf; Acts vi. and vii. contain the histories of the generals of king Mazdai, and of Mygdonia and Karish (Charisius); while the last section consists of the *Consummatio*, which is also extant in Greek (Tischendorf, p. 235, foll.) and Latin (Abdias, ix. 22, foll.). In the 7th act, the Syriac omits some of the miracles related by Abdias (capp. 14, 15); as a compensation for this the 4th act, the story of the speaking ass (pp. 179-181, Wright), is quite new. Several narratives and speeches are also new in the 7th and 8th acts, especially the hymn of the soul (pp. 238-245), and the following hymn (pp. 245-251). The Syriac text is less original than that of the Greek acts. The Gnostic features, which constitute the value of the book for church-history, are almost entirely effaced, and replaced by Catholic. The Gnostic prayers and hymns to Achamoth are changed into prayers to Christ; the Christology is the Nicene, but with echoes of Sabellianism (pp. 153, 173, foll., 187, foll., 208, 249, 267, 288, foll.). A strong light is thrown on the process of Catholic rewriting by the hymn on p. 195 of Tischendorf's edition compared with p. 150 of Wright's English translation. "The girl," "the daughter of light," by whom the original writer meant Achamoth, becomes in the Syriac the church; the chorus of the thirty-two aeons, who sing praises to her, the twelve apostles and the seventy-two disciples; at the words "groomsmen" and "bridesmaids" the number seven, which distinguishes them as the seven Archontes and their companions, is struck out; and in like manner the twelve servants, i.e. the twelve zodiacal spirits, are removed. On the same principle the Gnostic baptismal prayer (p. 213, foll. Tischendorf; cp. p. 166, foll. Wright), the speech of the dragon (p. 217, Tisch.; cp. p. 171, Wright), and other passages are rendered more Catholic in tone. The Gnostic rites, especially those at baptism and chrism, are also carefully removed, and the Catholic usages substituted (cp. especially p. 166, Wright, with p. 212, foll.

Tisch.; also p. 188, &c. Wright). Once, in the speech of the wild ass (p. 214, foll.) there is even a polemic against the Gnostic rejection of conjugal society, which is certainly in strange contradiction to the narratives of the book itself.

In spite of all the care of the orthodox editor, a few traces of Gnostic speculation are still visible, e.g. "mother of seven houses, whose rest was in the eighth house" (p. 166), and a few expressions in the prayer of Thomas in prison (p. 279, foll.). The *Hymn of the Soul*, pp. 238-245, deserves particular attention. It is an unadulterated Gnostic poem, which is not, like the rest, translated from the Greek, but was written originally in Syriac, and by a happy accident has been inserted in the *Acts of Thomas*, with which it has absolutely no connection. The metre is hexasyllabic. The hymn treats, under the figure of a king's son, of the fortunes of the soul, which has been sent down from its celestial country, to fetch the pearl watched by the snake here below, but forgets its commission, till it is reminded of it by a letter from the father, the mother, and the brother, "the second (in authority)," (i.e. πρῶτος ἀνθεπόμονος). Then the soul fulfils its commission, receives back its bright robe, and returns to its country. As for the geographical setting of the parable, Egypt is described as the lower world, the kingdom of the East, or Parthia, as the heavenly country, "Sarbug" (?), Babylon, and the great Maishân (Mesene), "the haven of merchants," as the stations touched by the returning soul. As the other geographical notices also prove, the song was written in the regions of the Euphrates. The form of the Gnostic ideas points to the teaching of the sect of the Ophites, but not to that party which worshipped the serpent as queen of heaven, but that which saw in her the evil world-soul. The part which Egypt plays in the hymn reminds us of the similar fancy of the Naassenes and Peratae in Pseudo-origenes. The hymn can scarcely have been composed by Bardesanes, not so much on account of the metre, as of the contents, which do not altogether tally with the peculiar doctrines of Bardesanes, as gathered from Ephrem. Besides, the thought which it develops recurs in the most different turns of expression in almost all the Gnostic systems. The date of composition is at any rate considerably earlier than the present Syriac translation of the *Acts of Thomas*. For it is certain that the latter is not earlier than the fourth century, whereas the hymn must have been written in the time of the Parthian empire, i.e. before 229.

The hymn to the Father and the Son, however, which immediately follows that of the soul (pp. 245-251) is of Catholic origin. Abdias has as little knowledge of the one as of the other; but what he offers us is nothing but a mere epitome of the Greek original. A comparison of the corresponding sections with the Syriac shows that Abdias largely abridged not only the speeches, but also the narratives, and omitted many passages which were in his view offensive, e.g. the description of the outrages which the wife and daughter of the general had to suffer from demons (p. 201, foll. Wright), the story of the wild asses which were yoked in the chariot of the apostle, the miraculous ejection of the demons by one of the asses at the apostle's bidding (p. 206, foll.), and much besides. Variations in the two narratives are of frequent occurrence. Thus the Syriac mentions a double examination of Thomas before king Mazdai (p. 262, &c., 274, &c.), which Abdias (ix. 13) merges into one. Abdias, too, knows (c. 24) only one parting prayer of the apostle, the Syriac two (p. 276, foll., 296). It is remarkable, on the other hand, that both in the Syriac and the Latin the name of the general is not mentioned till afterwards in the history of Mygdonia and Karish. The Syriac, too, calls him Sifir (p. 233), which agrees with the Sapores of Abdias. The names of the other persons are really the same as in the

other texts, though the original forms are only partly preserved. The king is called Mazdai (*Μαζδέος*, Mesdeus), the queen Tertia (so also in the Greek; Abdias has Treptia), the king's son Vizān (*Ιουζάνης*, Zuzanes), which confirms Gutschmid's conjecture, that *Ιουζάνης* conceals the Persian name Wijan.

In the section corresponding to the Greek acts, the Syriac sometimes gives the means of improving the Greek original. Thus on p. 214 of the latter the words of Codex A, rejected by Tischendorf and bracketed by Thilo, are partly confirmed, partly supplemented by the Syriac. The correct reading will be, ἡ δὲ ἀπληροτία . . . διαρπάζουσα τὰ ἀλλότρια καὶ ὑποψίαν ἔχουσα μὴ ἀποδῶσσα τὰ ἀλλότρια τοῖς δεσπόταις αἰσχυνθῆ, and just afterwards, ἡ δὲ ἐργασία τῆς κοιλίας εἰς φροντίδας . . . ἐμβάλλει τὴν ψυχὴν, μεριμνῶσα μὴ ἄρα ἐνδεῆ γένηται καὶ τῶν πόρρωθεν αὐτοῦ ὄντων θηρατήν (instead of θεατήν). After the speech of the dragon (p. 218, Tisch., p. 172, Wright), at the beginning of c. 33, the Syriac adds a few sentences which are wanting in the Greek. Similarly, there is a long section which is wanting in the Greek at the beginning of c. 34 (p. 219, Tisch.; p. 173, Wright)—the song of the youth raised from the dead: but the distinctly Catholic tone proves that it has lost its original form. A short addition also occurs in the words of the young man (c. 51, p. 194, Wright); and several other instances might be given: e.g. pp. 196, 198 (end of c. 54 and c. 56). A more important deviation from the Greek occurs in pp. 195, 196 (pp. 230, 231, Tisch.), in the speech of the girl. On the other hand, it deserves to be noticed that the very passages in which the Greek offers few if any traces of Gnosticism are given with great fidelity in the Syriac. The unavoidable inference is that our *Acts of Thomas* have undergone repeated Catholic redactions, and that the form which they assumed after the first of these was that which the editor of the Syriac translation had before him.

In the last act (p. 292, &c.), on the other hand, the Syriac text agrees pretty closely with the Greek *τελείωσις Θωμᾶ* (p. 235, &c. Tisch.), at least if we except the two first chapters of the latter, which present only a short extract of the foregoing narratives. Here again the Greek text may sometimes be filled up and corrected from the Syriac, the readings of which are often confirmed by Abdias, though he too gives a mere extract from the original. The words on p. 293, "And they rose early—told thee the truth," are wanting in the Greek, but occur in a condensed form in Abdias. In the reply of Thomas to the king (c. 4, p. 237, Tisch.), instead of οὐκ εἴμι δοῦλος καὶ τὴν κατ' ἐμοῦ ἔξουσιαν οὐκ ἔχεις οὐδὲ δύωσι, it is preferable to read with the Syriac (p. 293) and with Abdias, εἴμι δοῦλος, ἀλλὰ σὺ κατ' ἐμοῦ ἔξουσιαν, κ.τ.λ. But the reading of the Syriac on p. 294 is manifestly wrong, "Of what country art thou?" instead of "is he," as the Greek and Abdias read. In c. 10, after *συνήγοντο πάντες οἱ ἀδελφοί* (p. 240, Tisch.), the Syriac (p. 297) inserts a few words; while some lines afterwards (c. 11) it omits a few. The speeches and prayers in this part are again more original in the Greek than in the Syriac; e.g. c. 6 (p. 238, Tisch.; p. 295, Wright), and c. 8 (p. 239, Tisch.; p. 296, Wright). In both places Abdias has in part preserved the Gnostic colouring more faithfully than the other two. At the end of the work, both the Syriac (p. 298) and the Greek contain a notice that the bones of the apostle were taken away secretly, and conveyed to the West, while Abdias states with greater precision that they were removed to Edessa.

These remarks may serve to bring out the great importance of the writings collected by Prof. Wright. It may be added that the portions now published for the first time are of value to the historian of dogma, especially for the Christological views and the ritual observances of the first

centuries. With regard to the former, it is worth while to notice the frequently recurring allusion to Christ's outwitting of the devil (pp. 45, 78, 184, 279); and with regard to the latter, the very full description of the usages at baptism (p. 38, &c., 53, &c., 166, &c.), and at the Lord's Supper (p. 54, &c., 188, &c.), the mention of infant baptism (p. 42), and of the Eucharistic sacrifice (p. 55), as well as the custom of inscribing the sign of the cross on gates and ecclesiastical buildings (p. 55). But before parting from the work, let us express our hearty thanks, not only to the editor, but to Prof. Lightfoot, of Cambridge, who has generously borne the entire expenses of publication.

R. A. LIPSIUS.

Religious Thought in England from the Reformation to the End of the Last Century. A Contribution to the History of Theology.

By the Rev. John Hunt, M.A. Two volumes. Strahan and Co.

CONSIDERING the wide interest aroused in England at all times by religious questions, it is a matter of wonder that there is no history of religion in England which can take rank as a permanent book. We have many histories of the church, or books calling themselves so, but hardly any of them rise above the level of controversial pamphlets, in which the facts of the past are grouped into a case in favour of the writer's opinions. Mr. John James Tayler's *Retrospect* is indeed a book of a higher character, and is not so well known as it would be, were it not supposed, quite groundlessly, to be a "unitarian" history. Mr. Hunt may justly say that he is dissatisfied, and supposes most men are, with the spirit in which the history of religion in England is generally written. Mr. G. G. Perry's *History of the Church of England* is the work of a liberal-minded man, but is avowedly written from the point of view of the modern High Church party.

Mr. Hunt's two volumes are offered not as a history of ecclesiastical affairs, nor as a history of theological learning. His subject is intermediate between these two. He proposes to describe the successive prevailing phases of religious opinion, from the reformation to the end of the last century. To designate this subject-matter, Mr. Hunt is obliged to use a term to which there are strong objections, viz. "Religious Thought." But as no one has yet suggested a better, we must suppose that the language has no term for this complicated set of phenomena. Church, State, Literature, Art, Philosophy, Science—each of these names denotes a definite collection of facts, and each such collection of facts or phenomena can have, and has, its history. But what class of phenomena is intended by the term "religious thought"? Does it really mean anything substantially distinct from "theological literature"?

The answer must be that it does. "Religious thought" is not used by Mr. Hunt as an equivalent for "theological literature." He does not aim at being an ecclesiastical Hallam, and writing supplementary volumes to Hallam's *History of Literature*. Much rather might Mr. Hunt's work be said to be supplementary to Buckle's *History of Civilisation*. Neither books nor events are his subject, but opinion. It is true that neither the Christian creed nor the principles of Theism have been substantially changed since the reformation, yet the current opinions, sentiments, feelings, language, mental habits, which regard the permanent creed, have been in constant flow, and still flow on; "labitur et labetur." This flux of "thought" Mr. Hunt has taken for his subject—a highly interesting class of facts, but also one most difficult to seize and disentangle.

We all remember how in a cognate subject Mr. Buckle began his first volume by severely censuring the historians for describing the succession of events instead of tracing

the law of the succession, and how he ended in his last by doing exactly as they had done. We are not quite certain that Mr. Hunt has remembered his own definition of his object, "which is to trace the current of religious thought, and not to write a history of theological literature." He proposes to himself a history of the succession of ideas, but he slides into an analysis of the contents of books. But of the ideas which are consigned to books, only a very small fraction is taken up into popular opinion and becomes part of active thought. Circulating capital and fixed capital are two different quantities. Each man's mind contains a portion of ideas which is the common property of thinking men in his generation, and a portion which is peculiar to himself and a select class. The latter, or special knowledge, constitutes learning. It is of the former portion, or the sentiments shared by a writer with his age, of which Mr. Hunt intends to be the historian. If he has not always sufficiently kept this intention in view, and has allowed himself to analyse books in chronological order of publication, the sufficient excuse must be found in the evanescent nature of the subject, which is apt to elude the grasp. As a survey of the religious literature of England for the seventeenth and eighteenth centuries, Mr. Hunt's volumes have the field to themselves. There is no other book in which the information here brought together can be found. Mr. Hunt assures us in the preface that "in no case has the information been taken at second-hand!" Even a cursory inspection is sufficient to convince anyone that the notices are derived from original study of the authors. We have the contents of a vast library of books condensed in two convenient octavos.

MARK PATTISON.

HEBREW TEXT OF PSALM CXXXVII. 5.

TO THE EDITOR OF THE ACADEMY.

SIR,—The second clause of this verse presents a difficulty of which no tolerable solution has, so far as I am aware, been yet proposed. In the Authorised Version the difficulty is got over by the addition of two words to which there is nothing corresponding in the original text :

"If I forget thee, O Jerusalem,
Let my right hand forget [her cunning]."

The ancient versions give no help : LXX—"Let my right hand be forgotten;" Syr.—"Let my right hand forget me;" which, strangely enough, De Wette adopts.

Modern expositors are not more successful. Ewald : "so vergesse meine Rechte sich." Delitzsch : "versag' mir die Rechte." Others judiciously leave the sentence incomplete. Thus Küster and Hupfeld : "so vergesse meine Rechte"

The case appears to be one in which an emendation of the text may with propriety be resorted to as our only resource; and I, therefore, venture to suggest for consideration whether, instead of יָמַנִּי, we should not read בְּנֵי. In the ancient Aramean character the difference between בְּ and נְ is not great. The passage will then stand thus :

אָמַנְתָּךְ יָמַנְלָם
בְּנֵי יָמַנִּי
תְּרַבֵּק לְשׁוֹן לְחֵבִי
אָמַן אֲפְרִיכִי

"If I forget thee, O Jerusalem,
Let the strength of my right hand be dried up;
Let my tongue cleave to the roof of my mouth,
If I do not remember thee," &c.

The alteration, though slight, removes the grammatical difficulty, improves the rhythm of the Hebrew, and is, besides, borne out by comparison of Ps. xxii. 16 (15), where "My strength is dried up (בְּנֵי בְּנֵי) like a potsherd," is parallel to "And my tongue cleaveth to my jaws."

DUNCAN H. WEIR.

Intelligence.

It gives us much pleasure to notice Mr. Matthew Arnold's tasteful revision of the second part of Isaiah, with a slightly pretentious but very interesting preface. There is no reason why the more obvious results of technical scholarship should be withheld from the rising generation, or why "the children of the people" should not be introduced to the one great literature for which they have had some preparation. Mr. Arnold's object accordingly is, "not to present an absolutely correct version of the series of chapters treated, but merely to remove such cause of disturbance as now, in the authorised version, prevents their being read connectedly" (p. vi). He speaks in tone of satisfaction, which we cannot pretend to share, either as lovers of English or of exact scholarship, of the attempt now being made at Westminster to revise the Bible of 1611. He is himself a puritan in the matter of Bible English, and his corrections are studiously devised so as not to impair the effect of the diction or disturb the balance of the rhythm. Though heartily endorsing his views, we question whether there may not be room for another kind of translation, such as that of Mr. Cheyne, which simply aims at rendering the original accurately in appropriate English, and in so aiming is compelled to retain a good deal of the earlier fabric. No doubt, as Mr. Arnold shows at some length, this translator's "affectionate reverence" has withheld him from several (from his point of view) salutary though less important corrections. But in one point, which Mr. Arnold touches upon with some earnestness, Mr. Cheyne could not have acted otherwise than he did without a gross dereliction of his principles. "Those noble and consecrated expressions," as Mr. Arnold calls them—law, judgment, and righteousness—are often found the greatest obstacles to a distinct apprehension of the prophet's meaning. Mr. Arnold states, and we are bound to believe it, that he has learned enough Hebrew to follow critical commentaries. But is it certain, or even probable, that certain words in xl. 2 mean "her sin-offering is accepted" (p. xxv), and "double for all her rue (?)?" (p. xxvi, where, by the bye, Mr. Cheyne's view of the passage is exactly inverted)? Can Mr. Arnold's renderings of xlv. 9, 11 be justified, even as paraphrases? And is it consistent with his principles (see p. xvii) to correct lxx. 19, and leave xli. 2, especially as the authorised version of the former passage, though erroneous, is both lucid and grand, and that of the latter neither one nor the other? On the other hand, not a few of Mr. Arnold's corrections are either the best possible or as good as any others which could be proposed. Two in particular may be mentioned—xlvi. 19, "who is blind as God's *figeman*?" and liii. 2, "he grew up before him as a *slender plant*" (thin and insignificant, *not* tender and cherished). The latter rendering might have been further supported by Ezek. xvii. 22. The notes are beautifully terse, and supply all that "young learners" are likely to require. One word in conclusion. It is too bad of Mr. Arnold to bring such a sweeping charge against German critics on p. xxxiii. He seems to be unaware that his own view of the "Servant" is essentially that of Knobel. And on what authority does he assert that Ewald, "in order to save [his] hobby," tampers with the text at the opening of ch. xlvi.? These are traces of dilettanteism which disfigure an otherwise admirable work.

Our esteemed contemporary, the Roman Catholic *Literaturblatt*, of Bonn, contains (January 29) a critique of *The Speaker's Commentary*, which should have been noticed before, but through some accident has only just come to hand. The writer, Professor Reusch, agrees with our own reviewer (*Academy*, vol. ii. p. 335) in recognising the thoroughness of this work in most questions connected with archaeology, which he contrasts with the meagreness of the "strictly theological" element, and the comparative superficiality of the critical sections. Dr. Fell, the Egyptologist, of Cologne, subjoins a detailed examination of Mr. F. C. Cook's appendices on Egyptian history and philology. We are sincerely glad of his testimony to Mr. Cook's Egyptian scholarship, which has been unreasonably called in question by an eccentric writer in the *British Quarterly* (January). Dr. Fell, however, differs from Mr. Cook in many points, and maintains the ordinary view, according to which the exodus took place under King Menephthah, at the end of the nineteenth dynasty, and not, as Mr. Cook thinks, under Tuthmosis II., of the eighteenth dynasty. On the other hand, he endorses Mr. Cook's view that "the writer of the Pentateuch" possessed an accurate knowledge of the Egyptian language, and that this constitutes a strong presumption in favour of the Mosaic authorship. It should be remarked, however, that the relations of Egyptian to the Semitic languages are as yet far from being established with such precision as to justify so positive an assertion and so sweeping an inference. And we see no evidence that either Dr. Fell or Mr. Cook is acquainted with the actual situation of the Pentateuch controversy.

Prof. de Lagarde announces an edition of the Reuchlin codex of the Targums on the Prophets. Subscribers' names are requested.

Contents of the Journals.

Theolog. *Literaturblatt* (Rom. Cath.), March-May. — Biblical articles : Merk's *Job*; by Schegg. Hausrath's *History of the New-Testa-*

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ment Age; by Langen. [Clear, temperate, and learned; from the Tübingen point of view. Cp. rev. in *Theologisch Tijdschrift*.]—Ecclesiastical: Scharpp's *Nicolaus von Cusa*; by Schwab. [A reformer in Church, State, and Philosophy of the fifteenth century.]—Bickell, *On the Apostolical Origin of the Liturgy of the Mass, and its Connection with the Passover Liturgy*; by Langen.—Heimrici's *Valentinian Gnosis*; by Kraus. [Chiefly to show that the heretical Gnosis exercised no positive influence on the Fourth Gospel.]—Probst's *Works on Liturgies*; by Mayer.—Comparative Theology: Spiess' *Religionum indagatio*; by Stiefelhagen. [To show that the comparative study of religions has a scientific (apologetic) value in theology.] Philosophical: Hartmann's *Philosophy of the Unconscious*; by Hartsen; and *Das Ding an sich*; by Michelis.—Lewes' *Hist. of Philosophy*; by Storz.—Aristotle and Modern Science; by Katzenberger.—Ribot's *La Psychologie anglaise contemporaine*; by Hartsen.

Theologisch Tijdschrift, May.—The Anti-Paulinism of the Epistle of James; by Blom.—Oort, de Goeje, and Kuenen, on Micah iii.—v. [Oort has retracted his conjecture; see *Th. T.* 1871, p. 501, &c.]—Specimen of a History of the Logia Hypothesis; by Meijboom.—Postscript to the Dissertation on John in Asia Minor; by Scholten. [Answer to Hilgenfeld.]—Review of Burnouf's *La Science des Religions*; by Tiele. [Founded on too slender a basis of facts.]—Notices of Spiess' *Religionum indagatio* [on the whole, very favourable]; Weiss' *Marcus-evangelium*; Keim's and Hausrath's Histories, &c.

New Publications.

FRANZ, A. M. Aurelius Cassiodorus Senator. *Ein Beitrag zur Geschichte der theologischen Literatur*. Breslau: Aderholz.
RITSCHL, A. *A Critical History of the Christian Doctrine of Justification*. (English Translation.) Edinburgh: Clark.

Physical Science.

Geology of Oxford and the Valley of the Thames. By Professor Phillips, F.R.S. &c. Clarendon Press, 1871.

In the earlier days of geological enquiry, when men longed to have some clear notions of geology, it was not unusual to publish broad outlines of the geological structure and composition of a country. Sometimes these outlines appeared in the form of a map, sometimes in that of a treatise. They were necessarily very sketchy; and even when they gave correctly some of the leading features of geological structure, they often misrepresented others, or at least traced them with the imperfection which characterized the science of the time. Admirable, however, were some of these early attempts. No one can look, for example, on the maps of William Smith without astonishment at the sagacity and clearness of observation which guided their preparation. In later years came the desire and the necessity for filling in the details of the work outlined for us by the pioneers of English geology. Instead of maps or descriptions of the whole country or of entire geological systems, there appeared detailed notices of special districts—notices which bear the same kind of relation to the earlier works that elaborate modern county histories do to the older text-books of the general history of the country. This parallel may be extended to the remark that in geological as well as in political history the materials for research have now accumulated to so vast an extent that the full treatment of either the social or geological annals of one country is almost beyond the compass of a single writer. He must content himself with the story of one or two great periods, or he may betake himself to the task of tracing the records of one district, and showing how far they throw light upon the general march of historical development in the country viewed as a whole. It is this latter kind of treatment which is exemplified in the volume before us.

Into no abler or fitter hands could the geological history of the Thames Valley have fallen than into those of the genial professor of geology at Oxford. Old enough to have seen some of the splendours of the dawn of English geology,

and to have known not a few of the early leaders, and related by near ties of kinship to William Smith, the greatest of them all, Professor Phillips moves among us with a kind of antique glory. We reverence in him the traditions of the past. But he has other and higher claims. Trained in the school of Smith, Buckland, and Conybeare, he has been intimately associated with the progress of geology in England for half a century. As an original investigator he has done much to elucidate the geological structure of the country and the nature of its former inhabitants; at one time working by himself, as in Yorkshire, at another time in concert with his colleagues of the Geological Survey, in Wales, Devon, and Cornwall, the Malvern Hills, and other tracts. As one of the earliest and most laborious members of the British Association, he has unquestionably given an impetus to the spread of a desire for geological information throughout the country, and now for the last sixteen years he has been at work sowing the same desire among the youth at Oxford. No man could more appropriately have undertaken the task of gathering up the sum of all that is known regarding the rocks which enclose and underlie the great valley of the south of England, and respecting the ancient tribes of plants and animals of which these rocks are the tombs.

The valley of the Thames, as Professor Phillips treats it, contains more or less perfectly developed representatives of all the great geological formations from the oldest fossiliferous rocks of England up to the most modern alluvium. Far to the west, and, in a strict sense, beyond the limits of the valley, lie the ancient formations which rise into the picturesque outlines of the Malvern Hills. Eastwards beyond London stretch the gravels and brickearths from which the later extinct mammalia and the earliest traces of man have been found. Between these limits the Secondary rocks, rich in fossils, and exposed in many natural and artificial sections, spread all over the country of which Oxford is the centre. Hence, in treating of the geology of Oxford, Professor Phillips brings before his readers no mere local details. The history of his district is in reality in great part the history of the whole country, and this fact he makes abundantly clear in the present volume.

Starting with a brief *résumé* of the historical notices of Oxford geology, and paying a kindly tribute to the memory and the labours of his early friends, the author sketches the general physical features of the Thames Valley—hills and vales, rivers, rainfall, springs, and water supply. He then passes on to describe the various geological periods, beginning with the oldest and rising through the long series up to recent times and the changes which are going on now. His most ancient rocks are those of the Malverns, the metamorphosed portions of which he classes as belonging to the “first or gneiss period of Malvern.” Though there may be great doubt as to the real geological age of these rocks, it seems a pity now-a-days to talk of a “gneiss period” when the metamorphic origin of the gneissic texture is fully recognised, and when the use of such a phrase, though intelligible enough, sounds somewhat like a resuscitation of the long extinct Wernerian dogma of the precipitation of the Gneiss and the Schists from a primeval ocean. Next come the Cambrian, Silurian, Old Red Sandstone, Carboniferous, and Permian rocks, which, as not strictly coming into the Thames Valley, are rapidly described along with the fossils characteristic of each formation.

It is the Secondary systems which are of course most fully treated by Professor Phillips, and as a text-book for these his volume will be chiefly valued. Beginning with those curious shales in the vale of Severn to which the name of Rhaetic has been given, he describes in considerable detail the subdivisions of the Jurassic and Cretaceous systems

and their more marked organic remains. The Oolites, as might be expected, are elaborately described, more especially those subdivisions which occur so markedly around Oxford, and of which the organic contents are so well illustrated in the University Museum. The nature of the strata of each subdivision is described along with the changes which they show in thickness or other characters as they are traced across the district. At the end of the account of the rocks of each period comes a full list of the fossils peculiar to or characteristic of each formation. This part of the book is admirably executed. The lists themselves are valuable for reference. Not less so are the short but lucid generalisations by which they are accompanied. Their most important feature, however, is the detailed description given of many of the species, particularly of the Oolitic Vertebrates. Professor Phillips has the faculty of making the dry bones live again for us. As he arranges jaws, skulls, teeth, ribs, and vertebrae before our eyes, the antique animal seems to career through the waters as it used to do among Ammonites, Belemnites, and other long extinct forms. In his careful analyses of the structure of *Megalosaurus* and *Ceteosaurus* he has not only done much for the elucidation of the palaeontology of his district, but has made an important contribution to our knowledge of the extinct Saurians which peopled the rivers and seas of England during the Middle Secondary periods.

Professor Phillips pauses now and then to note the bearing of his subject upon some of the wider questions of science which are now engaging attention. For instance, after describing the wonderfully complete series of fossiliferous strata forming the Oolitic system of England with its great diversities of organic remains, and the long period of the earth's history which it chronicles, he takes notice of the light which it may cast upon such questions as the origin of species. His reference, however, is tantalizingly brief, nor is it always as clear in phraseology as other parts of the book. Assuredly in this country, at least, no such basis of palaeontological evidence can be found for testing the worth of theories of the origin of species and genera as that furnished by the richly fossiliferous Jurassic series of rocks. And we should have been glad to have from the Professor of Geology at Oxford some fuller exposition of the conclusions to which his life-long labours among these rocks have led him.

In the last two chapters we are presented with some general and cautiously expressed views regarding the waste of the surface of the Thames Valley, and the origin of its outlines, and with some information respecting the economically useful minerals furnished by the district. The volume is illustrated with maps, sections, and numerous plates of fossils. It may be cordially and confidently recommended to all geologists to whom the Secondary rocks of England are a subject of interest.

ARCH. GEIKIE.

Geographical Botany. [*Die Vegetation der Erde nach ihrer klimatischen Anordnung. Ein Abriss der vergleichenden Geographie der Pflanzen.* Von A. Grisebach. 2 Bände.] Leipzig: Engelmann.

THE science of Geographical Botany is yet in its infancy. In English, we have no extended work on the subject; in fact, if we exclude books treating merely of the floras of limited areas, valuable as far as they go, our original literature on the subject is almost confined to the slight sketches by Dr. Hooker comprised in the Introductory Essays to his *Floras of New Zealand and Tasmania*, and in his lecture on Insular Floras, delivered at the Nottingham meeting of the British Association in 1866. On the Continent the earliest publication of importance was an offspring of the gigantic

intellect of Humboldt, his *Essai sur la Géographie des Plantes*, published in French and German in 1805 and 1807; this was followed by a Danish work by Schouw in 1822, and by Meyen's *Grundriss der Pflanzengeographie* in 1836, a translation of which by the Ray Society is the only treatise on the subject accessible to the English reader; while the standard work hitherto, and the most recent of any high scientific value, is De Candolle's *Géographie botanique raisonnée*, published in 1855. It is therefore with no ordinary interest that botanists have expected the publication of the present work. Professor Grisebach's intimate acquaintance with the vegetable productions of several widely separated portions of the surface of the globe, as evinced by the local floras which he has already published or edited, promised a contribution to botanical literature of no small value.

The first impression on opening the work is one of disappointment. We look in vain for those wide general views, for those philosophical generalisations which should characterize a work of this nature, the result of the unrearred investigations of years. Indeed in this respect Professor Grisebach's work will not bear comparison with the far slighter sketches by Dr. Hooker to which we have already alluded. The same failing in the mode of treatment characterizes the arrangement. To a closely printed work of upwards of 1200 pages, consisting of an immense mass of details, we have a table of contents of ten pages only, and no index whatever; so that, if we wish to ascertain the geographical range of any particular class of plants, or to turn to the author's views on any contested point, we have no resource but to look till we find it. The only excuse for this serious drawback to the value of the book is that the author is but following, though perhaps carrying to an excess, the custom of his countrymen. When once however we have allowed for these defects, and have fairly waded into the depths, our first feeling of disappointment gives way to one of admiration and delight at the enormous mass of information, worked out with infinite care and labour, here placed before us.

The phyto-geographical regions of the surface of the earth hitherto most generally adopted are those proposed by Schouw, twenty-five in number, each region being formed dependently on the extent to which its flora is endemic or peculiar to it. Grisebach divides the world into nearly the same number of regions, but takes into account, besides the endemic character of the flora, various other considerations—as, for instance, the general external features of the vegetation; and hence his boundaries differ materially from those of Schouw, and some of them are entirely new. They are as follow:—1. The Arctic Flora (of both continents). 2. The Forest Region of the eastern continent. 3. The Mediterranean. 4. The Steppes (of Central and Western Asia). 5. China and Japan. 6. The Indian Monsoon Region (including the whole of the Archipelago). 7. The Sahara (North Africa except the Mediterranean coast, and Arabia). 8. Sudan (Central Africa). 9. Kalahari (the western district north of the Cape). 10. The Cape. 11. Australia. 12. The Forest Region of North America. 13. The Prairies (including the south-western portion of the United States). 14. California. 15. The Mexican Region (including the greater number of the States of Central America). 16. The West Indies (including Yucatan). 17. Cis-equatorial South America (excluding the Andine region). 18. Hylaea (Tropical Brazil). 19. Brazil (south of the Tropics). 20. The Tropical Andes. 21. The Pampas. 22. Chili. 23. The Antarctic Forest Region. 24. Oceanic Islands (including New Zealand and Madagascar). This sub-division undoubtedly possesses greater claims to be considered a natural one than any that had been proposed before. The

regions necessarily vary extremely in size. The Forest Region of the eastern continent includes the whole of Europe excepting the extreme south, and nearly the whole of Northern Asia south of the Arctic Circle; while the regions of California and the Cape are scarcely larger than Great Britain, and that of Chili is considerably smaller. Exception may no doubt be taken to some of the details. The flora of North-western Australia shows so close an affinity to that of the Malay Peninsula and the East Indian Archipelago that it is doubtful whether they can rightly be separated; and the recent researches of Dr. Welwitsch would seem to indicate the existence in Central Africa of more than one distinct flora.

In the details of each region Grisebach follows a plan suggested by Humboldt. After discussing the climate, natural and geological features of the country, and other general matters, he examines the vegetation under seven distinct heads, classified, not according to the natural affinities of the plants, but their external facies and habits, as follow:—1, woody plants; 2, succulent plants; 3, climbers; 4, epiphytes; 5, herbaceous plants; 6, grasses (including sedges and rushes); and 7, cellular plants (or the lowest forms of vegetation).

The real value and interest of the study of the Geographical Distribution of Plants lie in the light which it throws on the great question of the mode of origin of the infinite variety of life found at the present time on the surface of the globe; and to this end the vast assemblage of facts here collected will be of inestimable value when carefully collated and analysed. It has always seemed to us that the solution of the problem of the Origin of Species may be looked for more hopefully from a careful study of the vegetable than of the animal world. Plants, being fixed to the same spot for the whole of their lives, and unable therefore individually to choose the conditions most favourable to their growth and perfect development, must be to a greater extent than animals the creatures of the circumstances that surround them; and hence we ought the more easily to be able to trace the steps by which each form has supplanted its proximate ancestor. Towards this consummation we have, however, made but very little progress at present.

We are now so familiar with the idea that organisms which present a close similarity in the essential points of their structure have descended from a comparatively not remote common stock, that we are apt to forget that it is only within considerably less than fifteen years that the writings of Darwin and Wallace have forced upon the greater part of the scientific world the conviction of the truth of the theory of evolution. Prof. Grisebach is a supporter of the older doctrine of the original distinction of species, and of the all but exploded theory of "centres of creation." "Only," he says, "at certain places has the earth disseminated the first germs; but these places were innumerable, and arranged without symmetry, like the stars of the firmament, and each one has the capacity to produce a definite organic formation. Each natural flora is a separate creation, springing from an exchange between its centres of vegetation, and existing independently." This theory seems to us in every respect more cumbrous and less probable than the theory of evolution. It is wanting in that unity and simplicity which commend this latter view of the origin of existing forms of life so strongly; it can at all events not claim to have any more solid foundation of observed facts to rest upon; and it is open to the obvious objection that it is an elastic theory, capable of indefinite modification as our knowledge of facts increases. With each fresh geographical or botanical discovery, the advocate of this hypothesis would be ready to shift his "centres of creation" to any extent. The

tendency of scientific thought has inclined of late years strongly in the direction of extending to the whole realm of nature the "uniformitarian" explanation of which Sir Charles Lyell is so distinguished an advocate in geology. It is more in accordance with sound reasoning, it is more consonant with our increasing knowledge of natural phenomena, to believe that the state of things which existed in any past geological epoch was the result of an accumulation, prolonged through an indefinite series of years, of the same causes which we now see operating around us on every side, than that it was produced by convulsions or "cataclysms." The production of Grisebach's "centres of vegetation" would seem to require as violent an interruption of the ordinary laws of nature as the separate creation—according to the Linnean aphorism, *Species tot numeramus quot diversae formae in principio sunt creatae*—of all species as they now exist. Nor does our author offer any hypothesis as to the mode in which the dissemination of the earliest germs (*Ausstreuung der ersten Keime*) took place, or how the germs themselves were produced. It is singular, too, how all opponents of the theory of evolution are compelled constantly to make use of phrases—"relationship," "affinity," and so forth—which would appear to the unlearned reader to admit the truth of the doctrine which they are contesting.

We might urge further objections against Prof. Grisebach's theoretical deductions: but these form after all but a very small portion of the work under review. It is a more grateful task to express once more our sense of the eminent service he has rendered to science by the patient and laborious accumulation of this vast store of facts relating to one of the most interesting subjects which can engage the attention of the philosophic student of natural history.

ALFRED W. BENNETT.

Notes of Discoveries and Scientific Work.

Geology.

New Cretaceous Birds of North America.—Amongst the many objects of interest brought by the Yale College expedition from Western Kansas are the remains of several species of fossil birds in perfect preservation. An examination of this remarkable find has shown that they represent gigantic swimming birds, probably having their nearest living allies in the *Colymbidae*, but differing widely in many respects from the members of that group. O. C. Marsh, in the *Amer. Jour. of Science* for May, 360, proposes the name of *Hesperornis regalis* for this new bird.

Elephant Remains in Colorado.—In the coarse sand and gravel beds of the Arkansas river in Colorado remains of *Elephas americanus* are not rare. About a year ago two teeth and some bones of this species were found, and quite recently a large tusk, probably of the same species, was disinterred from the same deposit. (*Amer. Jour. of Science*, April, 302, and May, 373.)

The Loess in China.—Baron von Richthofen, who has travelled through a great part of China during the last few years, examined the extensive deposits of loess in the province of Shensi, which in some districts attain a thickness of from two to three thousand feet. They are not confined to the great valleys or river basins, but form the slopes of mountains, cap the tops of hills, and in fact cover a considerable portion of the province. This deposit, consisting chiefly of sand and silt with occasionally marly nodules, does not show the slightest sign of stratification, and the few land shells it contains are not rolled. Von Richthofen is not disposed to attribute the deposit to any agency of water or ice, but shows it to be the result of a subaërial action, which up to this epoch was one of the most energetic agencies influencing the contour of this portion of the globe. (*Verh. d. geol. Reichsanstalt*, 1872, No. 8, 156.)

Plant Remains in the Permian Beds of Bohemia.—Eighteen years ago C. von Ettingshausen described the occurrence of remains of plants in the anthracite-bearing shale of Budweis, in Bohemia, and compared them with the flora of the Alpine anthracite formation, which were believed to be true coal measures. D. Stur has published (*Verhandl. d. geol. Reichsanstalt*, 1872, No. 8, 165) the results of his recent researches on the floras of this locality, and of several others in

Bohemia, Moravia, and the Alps. It appears now placed beyond doubt that this abundant flora is of Permian age, and that the flora of Budweis especially belongs most probably to the "rothliegende" (lower Permian). Of the numerous species may be mentioned *Aethopteris conifera*, *Walchia piniformis*, *Odontopteris obtusa*, and *Neuropteris cordata*. It is of interest to note that the beds in which this flora occurs contains in Bohemia anthracite beds and in Moravia graphite.

The Coal Measures of Carinthia.—According to E. Tietze (*Verhandl. d. geol. Reichsanst.* 1872, No. 7, 142) the group of shales, limestones, and conglomerates, usually called the Gailthal beds, in Carinthia, and generally supposed to be carboniferous, represent in part only strata of the age of English and Silesian coal measures, the rest being of a higher horizon. It appears that in the mountains north of Pontafel the whole of the Carboniferous series is represented. The occurrence of *Productus giganteus* indicates the Lower Mountain Limestone series; and by the presence of *Littorina obscura* the lower portion of the coal measures is detected, whilst the occurrence of *Fusulinae* with plant remains determines the upper coal measures. Tietze's observations render it highly probable that the series of conglomerates, shales, and limestones resting on the Carboniferous beds belong to a higher horizon, and cannot rightly be included with what are termed Gailthal beds.

A New Crab from the Vienna Basin.—This new form, which was found in the Leitha limestone of the Tertiary basin of Vienna, is placed by A. E. v. Reuss near *Actaeon* and the living *Dairia varicolora*, but from several peculiarities of proportions and configuration has been made the representative of a new genus, and been termed *Phymatocarcinus speciosus*, Rss. (*Sitzungsber. d. k. Akad. d. Wiss.* lxiii. April 1872.)

The Geology of Queensland.—At the meeting of the Geological Society of London on 24th April, R. Daintree read a paper describing the Geology of Queensland. After directing attention to the scanty alluvium of Queensland with the great extinct fauna of mammalia and the so-called Desert Sandstone, which rests unconformably on Cretaceous beds, the author described the various deposits assigned to the Mesozoic epoch. Mr. Daintree supposes that, contemporaneously with the deposition of a series of marine beds to the west of the great dividing range of hills during the Oolitic and part of the Cretaceous period, a vast lacustrine deposit was accumulated over a large area to the eastward of the range, to which the sea subsequently obtained access. Among the Palaeozoic rocks, the author detects Carboniferous and Devonian strata; the former is represented in Northern Queensland by an extensive coalfield. Devonian rocks extend from 18° S. to the southern boundary of Queensland, and for 200 miles inland. They consist of slates, sandstones, and coral limestones. The upper portion of this series contains an abundance of fossil plants, and of the deposits containing them, those at Mount Wyatt are interstratified with beds containing *Spiriferæ*. Gold is found in many parts over the Devonian area, and the author entered in considerable detail into its mode of occurrence there. Metamorphic rocks occur in various localities; and the connection between the presence of certain Trap rocks in these Metamorphic areas and in the Devonian area and the production of auriferous and cupriferous lodes was traced. The volcanic rocks, the author believes, have played a most important part in determining the elevation and present physical contour of North-eastern Queensland; they follow the line of greatest elevation on the main watershed at altitudes of from 1500 to 2000 feet above the sea-level.

Squaloraias polyspondyla from the Lias.—In the *Geological Magazine*, April, W. Davies describes the rostral prolongations of this singular Liassic fish. The two projecting processes from the snout of this fish were regarded by Dr. Riley and Prof. Agassiz as forming a single rostrum; but the author maintains that the upper one is really a cephalic spine analogous to that met with and similarly placed in the male *Chimaeridae*, and that it was employed, as by them, in conjunction with the elongated rostrum for securely clasping the female. Mr. Davies refers to other characters in the anatomy of this curious fish, of which he gives an illustration.

The Quaternary of Sullivan Co. consists, in descending order, of blue and grey clays irregularly stratified with coarse and fine gravel; below these, the same clays with coarse gravel and boulders of granite, gneiss, quartzite, porphyry, with a small quantity of gold, copper, lead ore, magnetite, and garnet; and, under these again, blue and white plastic clay two to five feet thick. The stratified loess, considered to be next in time, contains at Fort Azatcal near Merom, a number of land shells, all of which are identical with existing species now met with in the State, with the exception of *Helix occulta*, which has not been found alive north of Arkansas. (*Second Report of the Geological Survey of Indiana, 1870*, by E. T. Cox; *Indianapolis, 1871*.)

Physiology.

The Action of Pepsin on Blood Fibrin.—In the last part of *Pflüger's Archiv*, Band v. Heft 8, is a long paper by v. Wittich on the ferment affecting the digestion of the fibrin of blood. The digestive fluid he employed was always the fresh glycerine extract of the minced

stomach of the pig, or some other animal; the fibrin used was that of blood which had been immersed in a considerable quantity of a 0·2 per cent. of hydrochloric acid. He concludes from his experiments that fibrin absorbs pepsin very energetically, but that the process of digestion commences with chemical combination, though perhaps of comparatively little stability, of the pepsin with the acid, and that this compound is the really active material. A series of researches undertaken to ascertain the effect of temperature showed that even with a considerable degree of cooling (to below 40° F.) the process of digestion is not entirely arrested, whilst it proceeds with the greatest rapidity at temperatures between 95° and 112° F.; higher temperatures than these appear to retard the action. V. Wittich also finds that for the digestion of a given amount of fibrin definite quantities both of acid and pepsin are requisite; the presence of water is also an essential condition. He maintains that Meissner's *parapeptones metapeptones*, &c. are to be regarded as representing the initiatory stages of the action of the pepsin-containing fluid on the fibrin, and that they are converted into peptone as the action proceeds, though, if the amount of pepsin present be insufficient, they may remain unaltered, the entire process, in fact, being analogous to the change of alcohol into ether by means of sulphuric acid.

Causes of Variation in the Amount of the Gases contained in the Blood.—Drs. Mathieu and Urbain, in a paper contained in the May number of Brown-Séquard's *Archives de Physiologie*, state that they have been able to establish the accuracy of the law, "that in animals maintaining a constant temperature, the quantity of oxygen absorbed by the blood varies inversely with the temperature of the air that they respire." In other words, the amount of oxygen that circulates in the arteries of a vertebrate animal with warm blood is greater when it is exposed to cold, and less when exposed to warmth; and, as a consequence, all the processes of organic combustion are rendered more active under the former condition, while they are retarded under the latter. They further show that under diminished pressure there is diminished absorption both of oxygen and of carbonic acid by the blood, and *vice versa*.

The Physiological Value of Alcohol as a Food.—Liebig, it is well known, regarded alcohol as a food, and classed it with sugar, starch, and fat, referring in support of his view to the large amount of carbon it contains, the facility with which it can be oxidized outside the body, and the disposition to fatten observed in those who, though they consumed little food, take much alcohol. During the last few years, however, considerable differences of opinion have arisen in regard to the correctness of these views, chiefly in consequence of the statements of Lallemand-Perrin and Duroy to the effect that whatever alcohol is ingested into the system is absorbed into the blood in an unaltered state, and after traversing the system is sooner or later eliminated by one or other of the excretory organs. This statement has been strongly opposed by the majority of English observers, as by Dupré, Parkes and Wallowicz, and Anstie. The question has again been raised by v. Subbotin, who gives an account of his investigations in the last part of the *Zeitschrift für Biologie*, Band vii. Heft 4. He experimented with rabbits, and after injecting some alcohol of the strength of 29 per cent. into their stomachs, carefully analysed the excretions of the bowels, lungs, skin, and kidneys, with an apparatus placed at his disposal by Prof. Voit. The amount of alcohol eliminated was determined by an indirect method: the alcohol was converted into acetic acid by the action of chromic acid, or of bichromate of potash and sulphuric acid, and after distillation the quantity of acid was easily ascertained. His results indicate that during the first five hours after the introduction of alcohol into the animal organism a by no means inconsiderable proportion is again eliminated by the skin, lungs, and kidneys; that at least twice as much alcohol passes off by the lungs and skin as by the kidneys; while, lastly, numerous considerations showed that his experiments did not show the entire amount of alcohol eliminated. He satisfied himself that in the course of twenty-four hours after alcohol has been introduced into the stomach of a rabbit at least 16 per cent. of it is eliminated either in the form of alcohol or of aldehyde. Dr. Subbotin contends that though alcohol is not a nutrient, it resembles arsenic in diminishing the disintegration of the tissues, and in this way may lead to fattening.

Effects of Extension of the Nerves on their Irritability.—G. Schleich, in the *Zeitschrift für Biologie*, Band vii. Heft 4, records a considerable series of experiments made with the object of determining the effect on their excitability by stretching nerves with various weights, and states that moderate extension of the nerves of the frog, the extending weight being about 40 grammes, causes no material diminution of its excitability; when, however, the weight exceeded this amount, the excitability rapidly diminished. In some instances, slight extension seemed to augment the excitability of the nerve. Muscular contractions were often observed when the extending weight exceeded 30 grammes.

Development of the Lens of the Eye.—D. Sernoff (*Russische kriegsärztliche Zeitschrift*, 1871, and *Medizinisches Centralblatt*, 30th March, 1872) has undertaken a series of researches to determine the

correctness of Kölliker's view that the lens of the eye is a product of the multiplication and modification of the epithelial elements. He pursued his researches on the fowl because in this animal, according to the concurrent testimony of Haller, Baer, and Henle, no *membrana pupillaris* is formed; the presence of that membrane in mammals might readily justify the belief that the capsule of the lens was derived from connective tissue, of which the *membrana pupillaris* consists. He began his observations on the second day of incubation. At this period an inversion begins to appear in the epiblast for the formation of the lens, but there is no opening in the mesoblast, and the lens is not in immediate contact with the eye-vesicle, as Remak maintains, but is separated from it by a lamina of the mesoblast (connective tissue). This lamina also becomes inverted into the cavity of the secondary eye-vesicle with the lens. At the lower border of the eye-vesicle is a thickening of this lamina, which fills it, and was formerly known as Schöler's inversion of the vitreous. On the third day, when the lens is already constricted off, the above mentioned lamina of connective tissue closes over it, and forms the temporary capsule of the lens. This was seen, but incorrectly interpreted by Remak. It is not structureless, as he states, but contains scattered nuclei, and exhibits a slightly fibrous structure. From the posterior half of the temporary capsule of the lens are formed successively: *a*, the vitreous, owing to a growth of the tissue on the third day; *b*, the posterior half of the capsule of the lens (a layer of connective tissue covering the posterior surface of the lens begins to thicken, and the nuclei originally present gradually disappear, leaving it structureless; this takes place about the fifth or sixth day); *c*, the *Zonula Zinnii* (aided by *a*' condensation of a portion of the vitreous which is situated in the space between the equator of the lens and the *corpus ciliare*; this occurs between the eleventh and fifteenth days). From the anterior part of the temporary capsule is formed: *a*, the cornea; and *b*, the anterior half of the capsule of the lens with the anterior chamber between the two, owing to fission of the temporary capsule into two laminae on the fifth day. There then develops on the posterior surface of the cornea an endothelium from connective tissue cells, which proceed from the substance of the cranial laminae. From the peripheral parts of the anterior half of the temporary capsule the iris grows, which is at first united by its pupillary border with the capsule, but afterwards, on the tenth day, becomes free. The border of the eye-vesicle now projects towards the posterior surface of the iris; from its external layer is developed the posterior pigment layer of the iris, and from its inner the so-called *membrana pigmenti*. It appears, then, that in birds the capsule of the lens is developed from an inversion of the same connective tissue from which Kölliker considered the *membrana pupillaris* to develop in mammals. Sernoff thinks that in mammals both the *membrana pupillaris* and the capsule of the lens are developed from Kölliker's lamina of connective tissue.

Chemistry.

The Transformation Products of Starch.—A paper on this subject was read before the Chemical Society on the 16th May by C. P. O'Sullivan. He finds that, if malt-extract be added to starch paste at 50° C., disorganization immediately commences, and the solution develops a blue colour with iodine. After the lapse of a few minutes, it colours iodine no longer blue, but dark reddish-brown. A few minutes later iodine ceases to strike a colour in the filtrate from the cooled solution. If the digestion be continued, a point is reached when the change is complete. The substance then in solution has a specific rotatory power [α] = + 15°, or nearly, and gives a reduction of cupric salts corresponding with 65 per cent. glucose; and although the digestion be continued for a considerable time, there is no increase in the amount of reduction. The three substances—soluble starch coloured blue by iodine, dextrin coloured dark reddish-brown by iodine, and dextrin not coloured by iodine—when dried at 100° in a current of dry air, have the composition $C_6H_{10}O_5$, and the same specific rotatory power, [α] = + 213°. The numbers usually given for the rotatory power of dextrin, + 138° 68 (Béchamp makes it + 176°), are incorrect, the substances employed for the determination having been a mixture of dextrin and sugar, and not pure dextrin. The final product of the transformation of starch by the action of diastase is a sugar having the same composition as cane-sugar and lactose, $C_{12}H_{22}O_{11}$. Its rotatory power is little more than twice that of the former sugar, [α] = + 15° (+ 74° × 2 = + 148°); and it reduces very nearly the same quantity of cupric salt as the latter. Maltose, as the new sugar has been named, reduces only two-thirds as much cupric salt as glucose; lactose reduces seven-tenths as much. The new sugar has not yet been obtained in a crystallized condition; there is reason however to believe that it will be so.

The Influence of Pressure on Fermentation.—At the meeting of the Chemical Society, on the 16th May, a paper on this subject was read by H. T. Brown. The author found that during alcoholic fermentation other gases besides carbonic anhydride are invariably given off. When malt worts ferment, he finds the gas unabsorbed by potash to

be about $\frac{1}{300}$ of the total gas evolved, and to have the percentage composition:—

Nitrogen	:	99.75
Hydrogen	:	4.85
C_2H_{4+2}	:	1.67
Nitric oxide	:	1.33
		100.00

The nitric oxide is traced to the nitrates of the fermenting liquid, the nitrogen to the decomposition of albuminoids. When fermentation takes place under reduced atmospheric pressure, the proportion of evolved gas not absorbed by potash is found to be considerably augmented, the increase being mainly due to hydrogen; and the oxidation products, acetic acid and aldehyde, are likewise more abundant in the fermented liquid. The author considers that water is decomposed during fermentation, dissociation of the water molecule being favoured by decrease of atmospheric pressure.

To celebrate the fourth centenary of the birth of Copernicus, which falls on the 19th of February, 1873, the committee of the *Copernicus-Vereins für Wissenschaft und Kunst*, established at Thorn, his native town, contemplate preparing a new edition of the *De Revolutionibus Orbium Coelestium*. It is to be an exact reprint of the first and memorable Nuremberg edition of 1543 as regards form and arrangement; and the text will be revised with the help of the original manuscript, which is still in the possession of the Graf von Nostitz-Rieneck. Persons desirous to subscribe for a copy, the cost of which will be one pound, are to make application to the committee before the 1st of June. The reprint is expected to be ready for distribution in January next year.

New Publications.

- BALFOUR, J. H. Introduction to the Study of Palaeontological Botany. Edinburgh : Black.
- BEQUEREL, C. Mémoire sur la Décoloration des Fleurs et des divers Tissus végétaux par les décharges électriques et la chaleur. Paris : Firmin Didot.
- BREE, C. R. An Exposition of Fallacies in the Hypothesis of Mr. Darwin. Longmans.
- BRUHNS, K. Alexander von Humboldt. Eine wissenschaftliche Biographie. 3 Bände. Leipzig : Brockhaus.
- BRUHNS, K. Atlas der Astronomie. Leipzig : Brockhaus.
- CHOVER, R. F. La Théorie géogénique et la Science des Anciens. Paris : Lettrielleur.
- DANA, J. D. Corals and Coral Islands. Low, Son, & Co.
- HÉBERT, M. Le Néocomien inférieur dans le Midi de la France (Drôme et Basses-Alpes). Paris : Blot.
- HEINEMANN, H. Die Rational-Theorie der Bewegung als Lehrbuch der Hydrodynamik. Hagen : Hammerschmidt.
- HÖLTSCHL, J. Die Anéroïde von Naudet und von Goldsmid. Wien : Reck.
- KOCH, F. E., und WIECHMANN, C. M. Die Mollusken-Fauna des Sternberger Gesteins in Mecklenburg. I. Abtheilung. Neubrandenburg : Brünslow.
- LAMY, H. Unité de la Matière. Clermont-Ferrand : Thibaud.
- MÜLLER, N. J. C. Botanische Untersuchungen. II. Heidelberg : Winter.
- NAUMANN, A. Ueber Molekülverbindungen nach festen Verhältnissen. Heidelberg : Winter.
- SMITH, R. A. Air and Rain. Longmans.

Philology.

Al-Harīrī's Durrat-alghawwās. [Pearl of the Diver.] Herausgegeben von Dr. H. Thorbecke. Leipzig : Vogel, 1871.

VERY few authors of the East are as well known in Europe as Al-Harīrī. He was first introduced into our literature by Friedrich Rückert, who equalled him in the mastership of his native tongue. Of late he has been rendered accessible to the English reader by Mr. Chereny's translation. His *Makāmāt* or "Sessions" are the most perfect specimens of rhetorical art in Arabic. Although he was not the first who practised it, his "Sessions" may fairly be considered as the foundation of this sort of literature not only in Arabic, but also in Persian, Turkish, and Hindustani. His influence is less remarkable from the fact that numerous writers tried to imitate him, than it is by the fact that he has thoroughly

altered, not to say infected, the style of all prose-writers ever since. Their chief object was not to express an idea, but to write brilliantly. Whilst in Hariri there is still a rational proportion between form and sense, after him the former has got the preponderance, encroaching upon, and in many cases altogether absorbing the latter. Hariri is the father of the bombastic phrase which has killed the spirit in literature.

Hariri was also a philologist. Being as a stylist the starting point of a literary movement, he stands in his quality of a grammarian in the *arrière-garde* of a great period, having no claim to original merits, but distinguished, if at all, by subtleties of minute importance. Arabian philology was started about the middle of the second century of the Hejra; it culminated in the third and fourth centuries, and *praeter propter*, A. H. 400, may be considered as the end of originality in this branch. Then begins the period of reproducing, rearranging, and collecting. People wished to supersede and antiquate the older works by compilations of them, and we must lament that their endeavours have been crowned with so much success.

The book, edited by Dr. Thorbecke, was composed with the object of preventing educated people from making blunders of any kind, mistakes in forms, words, and construction. Only the language of Koran, Hadith, and the ancient poets is classical; anything deviating from their usage is a vulgarism. Without any apparent order the author quotes those faulty expressions, adds his corrections, and tries to prove and to illustrate them from the just mentioned sources. The *Durrat-alghawwās* (that is, "Pearl of the Diver") is very well written, and more readable than books of this kind generally are. To the main work are appended two chapters, one on synonymics and another on wrong modes of spelling.

Naturally the subject of Hariri's puristic corrections has quite a different interest for us. What to him is vulgarism, is mainly the organic development of the language. The Arabic of literature has remained unchanged from the times before Muhammad till the present. It is supposed originally to have been spoken, pure and unmixed, by the tribe Kuraish, but as early as the second century people consult indiscriminately the Bedouins as those who spoke the purest language, no regard being had to what tribe they belonged and from which part of the country they came. Immediately after the first expansion of Islam the Arabs were greatly mixed with foreign elements in the towns. The dialect of common life began in many points to diverge from the rules of the classical language, less in consequence of the intercourse with foreigners than because the Arabic, like all other languages, had to run its course of organic development; *i.e.* deterioration, which progresses particularly rapidly in those times, when radical changes in the life of the nation are taking place. Even the very early grammarians observed this fact and tried to contend against it. To this misunderstood zeal we owe a small literature on the slang of those times, very valuable in so far as it furnishes us the connecting link between the dialects, spoken in our time, and the classical language. There is a great gulf between the two; to fill it up is one of the problems of modern Arabic philology. The means by which this may be effected are twofold; the works of ancient grammarians on slang and works written in dialect, which do not go much further back than the fourteenth century of our era. When these sources shall have been utilized, it will be time for somebody to try to write a history of the Arabic language; though a great many difficulties will still remain to be solved by his own conjectures. The comparative grammar of all Semitic dialects will also derive much light from the same source.

Regarding the individual merit of Hariri's work on slang we cannot form a very high opinion. The first books of this kind were composed three centuries before him, and ever since this branch of literature had been cultivated. From the materials amassed by his predecessors he has made a rather poor compilation. From a close comparison of the *Durra* with its sources it will, no doubt, be made out that very little original merit is due to him, and that the words in his preface, "And look! I have deposited in it (the *Durra*) all the pith and marrow of choice observations and subtle remarks, which are not to be found in the context of any book" are more grandiloquent than true. It seems, for instance, that the logical and stylistic observations are his own, whilst everything else had already been much more amply treated by others. He seems chiefly indebted to Al'asma'i, Tha'lab, and Ibn Kutaiba. It has frequently been the case in Arabic literature, that late compilations have been printed instead of their much more valuable sources. Although we are not of opinion that a book, simply because it is older than another of the same contents, must therefore be more valuable, still we must state that experience has led us to observe that (in the period of reproduction) the compilers, however careful and diligent they may seem, almost never have exhausted their sources to such an extent and in such a manner as to render the originals superfluous for us. Al'asma'i has been used by later authors more than anybody else, and still his treatises contain many observations which none of his compilers seems to have thought worth while transcribing. It is not our intention to reproach the editor for having chosen the *Durra*, but what we lay stress upon is this, that the sources of the *Durra* are much more valuable than the *Durra* itself; and that, in order thoroughly to utilize this literature on slang, it will be necessary to investigate the works of the predecessors of Hariri.

Silvestre de Sacy first directed the attention of scholars to the *Durra*, and edited about one third of the whole in his *Anthologie grammaticale*. Since it has been edited at Bühl, A. H. 1273 (1856). The edition of Dr. Thorbecke is based upon the Gotha manuscript, which was copied within a century after Hariri's death (A. H. 516). Besides he has derived much help and useful information from the commentary of Alkhafaji. The editor has carefully instructed the text with vowel and diacritical points; he has also added various readings under the text and a complete index of words and names. Dr. Thorbecke, well-versed in researches of this kind for years past, has a complete command of the language as well as of the subject, and he has produced a book which is sure to win him the gratitude of all fellow-students. In the preface he has added explanations and corrections. Those mistakes which had eluded the attention of the editor himself, have been corrected by Prof. Fleischer.

It is a great pity that, for reasons which cannot be the subject of scientific criticism, Dr. Thorbecke was prevented from giving a complete commentary of his own. Let us hope that another time circumstances will be more favourable to him and to us.

ED. SACHAU.

A Grammar of the Japanese Written Language; with a Short Chrestomathy. By W. G. Aston, M.A.

THE want of such a work as the one before us has long been urgently felt by students of Japanese. The study of a language so far removed in its structure from the European linguistic families must at all times be attended with difficulty, even when trustworthy dictionaries and grammars are ready at hand; how much the more then when each student has been compelled to find his own way through the almost untrodden field of Japanese grammar? Possessed with a

keener taste for scientific enquiry than the Chinese, Japanese scholars have devoted considerable attention to the construction of their language, and numerous treatises on the subject have appeared within the last century. In the work before us, Mr. Aston has embodied the results of a careful study of the most noteworthy of these, and has arranged the information he has thus acquired in an able and scholarly manner.

In common with the Altaic family of languages, Japanese is an agglutinative language, "that is to say, the roots of words suffer no change, and the results which are obtained in European languages by inflection are arrived at in Japanese by the use of separate particles suffixed to the root." With Chinese it has no connection, beyond the fact that at different periods numerous Chinese words have been imported into the language, but these have in no wise affected its essentially Altaic character. The original written language of Japan was alphabetical, and was introduced into that country from Corea, where a similar character is to this day employed; but when, during the sixth century, the study of Chinese, stimulated by the promulgation of Buddhism, became general throughout Japan, Chinese characters were adopted, as affording means for a greater latitude of expression. At the present day these may be read in four different ways. In some cases they possess the value of Chinese words, and in others they serve as equivalents of synonymous Japanese words. Again they sometimes represent the mere sound of Chinese words, and at others the sounds of Japanese syllables. When used in either of the two first capacities, they are described by native writers as *Manā*, or "direct names," and when in either of the latter ways, as *Kana*, or "borrowed names." As may readily be imagined, when literature became more highly cultivated, the difficulty of rendering by *Manā* the native modes of expression and poetical terminations became so great that a more extended use of Chinese characters, in their capacity as mere phonetic signs, came into vogue. The want of system, however, which at first attended their employment in this capacity gave rise to such confusion that it became necessary to adopt "alphabets, or rather syllabaries, known as the Katakana, or (Yamatokana), and Hiragana, or (Idzumo-gana)." Both these alphabets consist of forty-seven syllables, which, in the case of the former, are represented by abbreviated forms of Chinese characters, one side (*Kata*), or "a part," being taken to represent the entire character; while the Hiragana syllabary "is nothing more than abbreviated cursive forms of a limited number of the more common Chinese characters." In the latter syllabary each syllable is represented by several characters, so that the entire number of signs amounts to several hundred.

In modern Japanese writing the three forms of characters, namely, the *Manā*, the *Katagana*, and the *Hiragana*, are invariably used together, thus adding a further entanglement to a language already sufficiently complicated. The difficulty of determining whether the Chinese characters in a sentence should be read as *Manā* or *Kana* is often very great, and is overcome only by the instinct which is the result of proficiency, while the various forms employed in the *Hiragana* are distinguishable only after long and careful practice. The native grammarians divide the words of the language into three classes, namely, *Na*, literally "name," and including the parts of speech known in European grammars as noun, pronoun, and numeral adjective; *Kotoba*, "word," comprising verbs and adjectives; and *Teniwōha*, a word formed of four of the most common particles, viz. *te*, *ni*, *wo*, and *ha*, under which class are grouped the article and prepositions, together with the terminations of verbs and adjectives. This classification Mr. Aston has accepted as according well with the structure of the language, with this

difference only, that he subdivides the *Teniwōha* into two classes, uninflected subordinate words and inflected subordinate words. It must be understood that the uses of inflection in Japanese are in no way analogous to its functions in European languages. It has nothing to do with voice, mood, tense, person, gender, number, or case. Its principal office "is to give to the same root the force of a different part of speech, according to the inflection employed." The importance attaching to this use of inflection will be obvious when it is stated that all verbal and adjectival roots have forms in which they appear successively as nouns, adverbs, adjectives, and verbs. "Mood and tense are indicated by *Teniwōha*, or suffixes; person is only occasionally and indirectly intimated by the use of honorific or humble particles; gender is denoted by compounds similar to the English words 'he-ass,' 'she-ass'; and number and case are expressed, if at all, by suffixes or particles distinct from the noun." In common with all languages of the Altaic family, every word in a Japanese sentence which serves to define another word invariably precedes it. "Thus the adjective precedes the noun, the adverb the verb, the genitive the word which governs it, the objective case the verb, and the word governed by a preposition the preposition."

Such are, briefly stated, the leading features of the Japanese language. Through its more minute intricacies we have not space to follow Mr. Aston. On the subject of these we must refer our readers to his book itself, which, if carefully studied, cannot fail to prove a sure guide to an accurate knowledge of the language.

ROBERT K. DOUGLAS.

A Dictionary of English Etymology. By H. Wedgwood, M.A. Second Edition. Trübner, 1871-2.

MR. WEDGWOOD evidently belongs to the "old school" of Philology. The two main principles of all systematic etymology—(1) that before comparing two words, they must be traced back to their oldest forms; and (2) that every change of form must be justified by a reference to the known laws of sound change in the language or languages in question—are persistently ignored by him. His method is simply to take a word in modern English, and without troubling himself to ascertain its previous history, to set it down as imitative of the idea it represents, supporting his position with parallels drawn at random from the modern Teutonic or Slavonic languages. "The analogy between sound and movement is nowhere better illustrated than in the origin of *quick*. The radical image is a quivering sound, the representation of which is used to signify a quivering movement, and thence applied to express the idea of life as the principle of movement." He then proceeds to identify it with the German *quick!* "used interjectionally to express a sharp, shrill sound, as the squeak of a pig." This is extremely plausible, but if we trace back the word *quick* through the Gothic *kvius* to the original *giwas*, from the root *giw* = "live" (Latin *vivere*, Greek *blos*), the whole edifice falls to the ground. Mr. Wedgwood then quotes the Danish form *qvæg* and the compound *quægsand*, of which he says that it unites *quick* with *quæg* (in *quagmire*), in apparent ignorance of the fact that the change of final *k* into *g* is a regular law in modern Danish, and therefore that his comparison of English *quæg* with Danish *qvæg* is as groundless as his connecting *whole* and *hale* with Greek *hblos*—a blunder from which the study of so well-known a work as Professor Müller's *Lectures* might have saved him—and English *bad* with the German *böse!* But Mr. Wedgwood's sins against Grimm's Law are but a small tithe of his offences. Let us test him in the Romance languages. Under *mouse* he says,

"it is singular that the name of so familiar an animal should not have been retained in the Romance languages." It is clear that the reading of Diez's *Grammatik* did not form part of his philological programme, else he could hardly have missed the law so clearly laid down by Diez that all Latin monosyllabic words disappear in the Romance languages, and are replaced by dis- and polysyllabic formations.

The unsoundness of his general principles is only equalled by his inaccuracy of detail. A sound knowledge of the oldest English or Anglo-Saxon is surely an indispensable requisite for an English etymologist, yet even here we find such blunders as *bence* for *benc*, *laferc* for *lawerce*, *hreasan* identified with *risan*, &c. In many cases the Old English form is omitted altogether in favour of the corresponding Icelandic words, with which Mr. Wedgwood makes equally wild work. His Dutch words seem to be chiefly taken from the old dictionary of Kilian, and it will seem hardly credible that he is misled by the old *u* for *v* in *auegaen* (modern *afgaan*) to identify it with the *w* of *awkward*, but such is the fact. He might as well infer from the Elizabethan spelling *uerie* that Shakespeare said *werry* instead of *very*.

These few examples might be multiplied by the thousand, but enough has been said to prove the general untrustworthiness of the etymological part of the work. We will now turn to the Introduction on the Origin of Language, in which Mr. Wedgwood zealously defends the imitative theory. Here, again, his conclusions are generally of little value through his utter want of method and scientific training, yet he has collected a large number of interesting facts, and his criticisms on the mysticism of German philologists, especially on the "ding-dong" theory advanced by Professor Müller, are sound enough. But it is easier to pull down than to reconstruct, and we cannot see that he has done anything to prove the general applicability of his own theory. He has only given a large number of examples, many of which can be disproved by the simple process of tracing them back to an older form. Others, again, such as *cuckoo* and *cock*, are, as Professor Müller has well said, "dead sticks in a living hedge," which by mere accident have displaced the older *geac* and *hana*.

The insuperable obstacles, both phonetic and psychological, there are to the general application of the imitation principle have not been sufficiently weighed by Mr. Wedgwood. If we trace the sounds of the Aryan languages back to their oldest forms, we cannot fail to observe a general tendency to simplification both in the number of simple sounds and the extent to which they are combined with one another. It is certain that in the original Aryan language there were only ten simple consonants, *g*, *d*, *b*, *k*, *t*, *p*, *n*, *m*, *s*, *r*, with a correspondingly limited number of compounds. Indeed every analogy leads us to suppose that in a still earlier stage of the language there were no consonant groups at all, and that every consonant was necessarily followed by a vowel. It is evident that under these circumstances the range of the imitative principle must have been very limited. And it must be borne in mind that even the pre-historic Aryan root-words registered in such a work as Fick's *Indo-Germanisches Wörterbuch* are comparatively modern in form, and consequently that, even if a large number of these roots could be explained on the imitative principle, there would be no certainty of the same explanation holding good of the same roots in an earlier form. The second objection is that the most primitive and indispensable words of language are just those which could not possibly have originated directly from imitation: the first object of language must have been to make known the most pressing material wants, such as hunger and thirst, not to call attention to the song of the nightingale, or discuss the ornithology of the cuckoo.

Towards the end of his essay, Mr. Wedgwood wanders off to the interjectional theory, which he somehow contrives to mix up with the principle of imitation. He says that when a Greek expressed surprise with *babai*, he was *imitating* an instinctive interjection, whereas the truth is that there is no imitation at all in the matter; it is the sound, the interjection itself, which is used to express the idea. When Mr. Wedgwood comes to *papa* and *mamma*, he quotes with approval the explanation of La Condamine, that "they are the first that children can articulate, and consequently those which must in every country have been adopted by the parents who heard them spoken." This is probably correct, but what has it to do with imitation or even with interjection? What natural sounds do the words imitate, or what emotions do they express? None, at least, that Mr. Wedgwood can point out. All this is at the best mere beating about the bush: nursery jargon and imitation run alongside of language proper, but without influencing it appreciably; where language begins, they leave off. The large number of imitative bird-names in savage languages asserted by Mr. Wedgwood is exactly paralleled by their great use of gesture (some tribes of American Indians, it is said, cannot carry on a conversation in the dark), but as language increases in copiousness and precision, the imitation and gesture words drop out, and are replaced by legitimate non-imitative words, founded on some definite function or attribute of the thing named, not on a mere accident of sound.

Before parting from Mr. Wedgwood, we cannot but express our regret that he has not taken more trouble to familiarise himself with the leading principles of philological investigation: a few months at any good comparative grammar might have saved him from nearly all the serious errors he has fallen into, and enabled him to turn his extensive reading to a really profitable account.

HENRY SWEET.

Intelligence.

Has Vergil already become one of the great forgotten? Somehow or other this trivial question is one very likely to suggest itself to most readers of a recent article by that acute scholar, Herr Lucian Müller, the well-known author of the treatise, *De Re Metrica*, and editor of we know not how many of the Latin poets. In the current number of the *Rheinisches Museum* he seizes the opportunity of showing up certain errors of Gaisford in his edition of the *Scriptores Latini Rei Metricae*. One of these writers on metre, Marius Plotius, gives the following as an instance of an hexameter with dactyls in the second and fifth places in the verse:—

"Contemplator item, cum se nux plurima silvis."

So runs the line in Gaisford's text; Herr Müller, however, decides that Gaisford is wrong here, and tells us we must read not *nux*, but *nox*, on the ground that the line is a "manifest imitation" of the Lucretian

"Contemplator enim, cum solis lumina cumque
Inserti fundunt radii per opaca domorum."

We can only suppose that Gaisford, in blissful ignorance of literature, imagined Plotius to be quoting from the familiar place in the *Georgics*:

"Contemplator item, cum se nux plurima silvis
Induet in florem, et ramos curvabit olentis"—

in which case, in spite of our insular prejudices in his favour, we rejoice to see him receive the castigation he so clearly deserves.

In the *Abhandlungen* of the Royal Academy of Berlin, Professor Weber has lately printed the *Pratijñásítram*, a phonetic treatise belonging to the white Yajurveda, with a German translation and a commentary written by Rāmaśarman, in the beginning of the present century. This little manual consists of twenty-seven rules, partly treating of the accents used by the Mādhyandina school in reciting their Veda, and partly on modifications of the original pronunciation of certain letters, which in course of time had crept in in private Veda reading. Several of these rules are very interesting, showing as they do some of the modifications which the original Sanskrit sounds had already undergone in the common language at the time these rules were framed. To this treatise Professor Weber adds a passage from the *Yajnavalkyá-sikshā* on the representation of the various letters by means of certain signs made by the fingers; and some remarks on the symbolical employment of the fingers in Hindu life and literature. He also communicates,

in two appendices, a fragment of the *Pratijñāpariśikham*, a supplement to the same Veda, enumerating its schools and the subjects treated in its Sanhītā; and an analysis of the *Mandākī-piśhd*, another phonetic treatise, of which a MS. has been presented to the Berlin library by Dr. Bühler, of Bourbey.

In the monthly *Proceedings* of the Berlin Academy for February, another paper by Professor Weber is published, containing an interesting account of the Indian game of chess, according to a detailed description given of it in the first book, or *Tīkhatattva*, of Raghunanda's great *Digest of Hindu Law*, which, according to Dr. Bühler, was compiled in the beginning of the sixteenth century. It is well known that the game is mentioned as having originated in India, by Arabic writers as well as by Firdusi, who in the *Shah Nāmeh* states that it was introduced at the courts of the Sassanian king Nushirvan (A.D. 529-577) by a Hindu, who acted as the ambassador of the king of Canouj. The Sanskrit name of the game is *chaturanga*, originally an expression for the fourfold disposition of an army in foot, horse, cars, and elephants. The late Mr. Bland, in a paper published in the *Journal of the Royal Asiatic Society* for 1852, gave a full and highly interesting account of the various modes of the game and the legends regarding its origin, drawn from various Persian and Arabic MSS.; and on the authority of some of these legends, and the assumed Persian origin of the name for the Rook (*rūkh*), he claimed the invention of the game for Persia. Professor Weber now adduces a passage from Halāyudha's *Commentary on Pingala's Chandasūtra*, in which *chaturanga* occurs as a name for "chess," and proves it to have been a game well known in India at that time. The writer is generally supposed to have lived before the end of the tenth century.

Magyar Nyelvör (Nos. II. to V.) fully sustains the promise given by the first number which we noticed in the *Academy* for February I (vol. iii. p. 58). Its contents fall into three classes:—First, matter interesting only to students of Hungarian as a living modern language. Such are the corrections of the bad Hungarian found not only in the periodical literature of the country, but also in books written by members of the Hungarian Academy, and even in the great dictionary published under the auspices of that learned body. The mass of Germanisms revealed by the *Nyelvör* is large enough to make any ordinary patriot despair of maintaining the purity of the language. A large proportion of these foreign idioms originate in the numerous translations, generally from the German, made by "New Magyars" more familiar with the language from which than with that into which they translate. The second class of contents consists of materials for a more extensive knowledge of the folk-lore and popular dialects of the Magyars, every number containing hitherto unpublished songs, proverbs, dialectical vocabularies impartially collected from every district between the frontiers of Styria and those of Moldavia. The third class of subjects treated of does not take up so large a space as the two preceding, though of more general interest to philologists. It consists of examinations of old documents, comparison of cognate languages, &c. throwing light on the growth of the language and the etymology of obscure words. Thus Dr. Budenz explains *egyháza*, "church," by an obsolete adjective *egy*, or *ig* = "sacred," of which traces are found in a few names of places, e.g. Hegykö, in German Heiligenstein, in the county of Sopron.

Orientalists generally will endorse Professor Cowell's eloquent protest against the abolition of the chair of Hindu Law in the Calcutta Sanskrit College (see *Times*, April 15). The native editor of the *Hindoo Patriot* remarks that "nothing could be more shortsighted . . . That is the one branch of Sanskrit study which is of the greatest practical importance to the country . . . In the Sanskrit College alone is there a chair of Hindu Law, and the venerable Pundit who held it, but whom under the inexorable fifty-five-years rule the Government has lately driven from the service, is the highest authority on the subject. But under the auspices of Mr. George Campbell this only source of Hindu Law is to be shut up."

Mr. Cheyne, of Balliol College, writes to point out that Mr. Poole is in error in supposing (*Academy*, May 15, vol. iii. p. 197) that M. Chabas has given the first explanation of the LXX rendering of Gen. xlvi. 31, ἐν τῷ ἔπον τῆς πάθου ἀτροῦ, as Dr. Geiger (*Urschrift*, pp. 371, 372) has offered a very similar hypothesis, which at the same time throws light on the Masoretic reading.

We venture to draw the attention of the numerous students of the Greek tragic poets in this country to N. Wecklein's recently published *Studies on Aeschylus* (Berlin, W. Weber), a work which contains a number of very accurate and elaborate investigations concerning Aeschylus' style and diction, a disquisition on the MSS., and detailed discussions of metrical points, with a considerable addition of convincing and many probable, conjectures. The same author has also just published a school-edition of the *Prometheus* of Aeschylus (Leipzig, Teubner).

A very remarkable and thoughtful monograph on the ancient silver-mines of Laureum has just appeared, by Aristides K. Oekonomos, *τὸν θεραπευτικὸν θέματος*.

Contents of the Journals.

Rheinisches Museum, xxvii. pt. 2.—A. F. Nägele: On the Theban Tetralogy of Aeschylus. [With a short preface by Ritschl.]—E. Bährens: Critical Notes on the *Panegyrici Vetera*.—K. W. Nitzsch: On the Sources of Herodotus for the History of the Persian Wars. [Shows that Herodotus, in his account of the Persian war, is not following any previous writers such as Choerilus of Samos, but merely following the popular narratives current in the great houses connected with Pericles at Athens and the royal house at Sparta: just as his earlier narrative depends on the λόγοι of Egyptian and Persian priests, &c.]—L. Jeep: On *Claudianus de vi consulari Honorii*: a contribution to Roman topography. [Discusses the poem as illustrating some points of Roman topography, such as the situation of the Temple of Jupiter Capitolinus and that of the Tarpeian Rock.]—J. M. Stahl: On Thucydides. [Defends the genuineness of Thucyd. iii. 17.]—L. Müller: On Marius Plotius and Nonius.—K. Dilthey: Critical Notes on the Greek Anthology.—J. H. Mordtmann: Unpublished Greek Inscriptions. I.—F. Bläss: The Poem of Simonides in the *Protogoras* of Plato. [Another reconstruction of the fragments.]—F. Ritschl: On the Literature of Plautus. III. [Draws attention to an extremely interesting letter of Camerarius.]—C. Wachsmuth: *Δρύμειος* and *Δρύμηρα*.—K. Lehrl: The Opening of *Odyss.* i. and *Odyss.* v.—On Plato.—W. Teuffel: On Horace.—Erotemata philologica, &c.

Journal of the Bombay Branch of the Royal Asiatic Society, vol. ix. No. xxvii. — On some Sanskrit Copper-plates found in the Belgaum Collectorate; by J. F. Fleet. [A Devanagari transcription is given of nine copper-plate grants in the Hala Canarese and Kāyastha characters, which contain two different lists of Kadamba princes, hitherto unknown. The writer inclines to the opinion that they preceded Maydravarmā, who is the first in Sir W. Elliot's *Genealogy of the Kadambas*, and probably reigned about A.D. 580-600.]—The Shrine of the River Krishnā at the village Mahābaleśvara; by Rāo Sāheb Viṣvanāth Nārāyan Mandlik. [An account of this shrine, sacred to the river Krishnā, is here given. Another shrine at the same village, which is sacred to Mahābaleśvara, the writer takes to be much more modern, and established after the model of the very ancient shrine of Mahābaleśvara at Gokarna, in North Kānarā.]—Some Further Inscriptions relating to the Kadamba Kings of Goa; by J. F. Fleet. [Seven more grants, mostly in the Canarese character. They show that the residence of these Kadamba princes was neither Bānavāsi nor Halsi, but Goa, Sanskrit Gopaka.]—Report on Photographic Copies of Inscriptions in Dharwar and Mysore; by Dr. Bhau Daji. [Accounts of fifty-seven inscriptions, mostly Canarese, contained in a photographic work published by the Committee of the Architectural Antiquities of Western India. They relate to the Chālukya, Vādava, Kulachuri, Kadamba, Gupta, Ratta, and Singha dynasties.]

The Pandit, vol. vi. No. 71 (Benares, April 1).—The *Sabaddakhandā* of the Chintāmani; with a Commentary. [Continued.]—The *Gopila-Itti*, a poem by Rāmachandra [concluded; Books 18 and 19]; with a résumé [upasamhāra].—The *Viddhayālabhanjika*, a drama by Kavirāja Rajagekhara [continued; the first part of the fourth act].—Sanskrit text and English translation of the *Vidvanmanoranjīt*, a commentary on Sadānanda's *Vedāntasāra*; by Rāmatirtha. [Continued; by A. E. G. and G. D.]—Supplement: Catalogue of Sanskrit MSS. [Continued: Vols. 67-72 of the *Dharmaśtras*.]

New Publications.

ANTHOLOGIA PALATINA. Ed. Fred. Dübner. Vol. II. Paris: Didot. BERNARDY, G. Grundriss der griechischen Litteratur. Dritte Bearb. 2. Th. 2. Abtheil. Halle: Anton. BHĀMINI-VILĀSA, Le; texte sanscrit, publié avec une traduction et des notes, par A. Bergaigne. (gième fascic. d. la Bibliothèque des Hautes-Études.)

BOUCHÉ-LECLERCQ, A. Placita Graecorum de Origine Generis Humanæ. Paris: A. Franck.

MÉLANGES ASIATIQUES tirés du Bulletin de l'Acad. impériale des Sciences. Tom. vi. livr. 3 et 4. St.-Pétersbourg.

WEBER, A. Ueber ein zum weissen Yajus gehöriges phonetisches Compendium. Das *Pratijñāśūtra*. [Berlin Academy.] Berlin: Dümmler, in Coimbra.

The contents of the *Journal asiatique* and *Götting. gel. Anzeigen* were by an oversight placed in our last number under the head of Theology.

ERRATUM IN NO. 48.

Page 187 (8), line 4, for "one" read "our."

POSTSCRIPT.—We have received as we are going to press a full Report of the Meeting of Philologists at Leipzig, from our Special Correspondent; which we regret to be compelled to postpone for a fortnight.

THE ACADEMY.

"INTER SILVAS ACADEMI QUÆRERE VERUM."

Vol. III.—No. 50.

Readers are reminded that the mention of New Books, Articles, &c., in our lists is intended as a guarantee of their importance. The Editor of THE ACADEMY cannot undertake to return communications which are not asked for.

The next number will be published on Monday, 1 July 1, and Advertisements should be sent in by June 26.

General Literature.

GERMAN MEDIAEVAL LITERATURE.

Deutsche Classiker des Mittelalters: mit Wort- und Sacherklärungen. Begründet von Franz Pfeiffer. Zwölf Bände. Leipzig : Brockhaus, 1866-1872.

Deutsche Dichtungen des Mittelalters: mit Wort- und Sacherklärungen. Herausgegeben von Karl Bartsch. Erster Band. Leipzig : Brockhaus, 1872.

ONE of the best and most thoughtful of the students of German literature, whose work on that subject is constantly appearing in fresh editions, the late Vilmars, truly said that there was one man above all others who possessed the imperishable merit of having fed and fostered with all his strength the growing taste for the treasures of old German poetry; this man was Friedrich Heinrich von der Hagen. Gratitude for what he accomplished in this field is the more incumbent on us at the present day as his merit is to a certain extent overshadowed by the progress of later researches, which naturally and inevitably supersede his. This is undeniably the case, as every student of old German literature is aware; for the long series of patient enquirers from von der Hagen to Pfeiffer and Bartsch have been unweariedly exploring its rich veins, and they have learnt to separate the pure ore from the dross surrounding it more perfectly than formerly. Nevertheless, the poetical productions of the German past remained inaccessible to the mass of readers who could make no use of even excellent critical texts, encumbered as they were with innumerable variants, and destitute, in spite of all the difficulties they presented, of every explanation of either language, meaning, or subject, which were consequently only available for the small class of professional students. To the cultivated majority all this body of poetry remained unknown, because the language was unintelligible. The *Nibelungenlied* was a solitary exception, in having penetrated by the help of translations to every level in the German people, whilst it had also become known to the other nations of Europe. The reason of the pleasure everywhere taken in this poem is to be found simply in its subject and spirit, which, even in translations, seize the reader with an irresistible power. It is, therefore, an exaggeration when Pfeiffer, the founder of the present collection, and editor of the first volume, observes in the preface to it: "The spirit of the past is only very imperfectly represented in translations; it is quite impossible to translate a Middle High German poem even tolerably into Modern High German; the thing cannot be done unless we sacrifice with ruthless hand its fairest bloom and fragrance, and what remains is at best a pallid copy of the original work." This remark is thoroughly inapplicable to translations like Simrock's of the *Nibelungenlied*, which has gone through twenty-four editions, and

VOL. III.—NO. 50.

reaches a fresh one nearly every year, and to various other excellent translations of the same poem, such as the one by Bartsch, who, since Pfeiffer's death, has edited the *Deutsche Classiker*, and evidently has shown that he does not share Pfeiffer's opinion on this point. Even mediocre translations may produce a powerful effect if the original is sufficiently valuable, as, to quote a single example, Wieland's translations of Shakespeare produced upon Schiller; and there is some truth even in Voltaire's assertion that the real value of a poem cannot be certainly determined except by rendering it into prose and observing if it retains its power; Charles Lamb's *Tales of Shakespeare* readily suggest themselves as an illustration. If we consider, too, how many excellent translations of poetry there are in nearly every literature, we feel at once that Pfeiffer was carried away by zeal for his own projected undertaking into a rash assertion; for the early German language and literature is no exception to the rule, and has at least as much affinity with modern German as that has with Greek or Sanskrit. Of course, to know the ancient poetical literature of Germany—or of any other country—so as to appreciate its inner nature and its most delicate peculiarities, the reader must acquaint himself with the originals, and the value and merit of the present editions is that they make these originals accessible to everyone who knows German. They presuppose readers who have no knowledge at all of ancient German, and the explanatory notes on the text consequently include every unusual word or grammatical form, instead of only noticing words which are not to be met with in the literary language, or of which the meaning has changed. For greater convenience the notes are placed at the foot of the page, the first time a phrase occurs in the book; as a rule they are not repeated afterwards; but that there may be no difficulty in referring back to the necessary note, there is a special table at the end of each volume of all the words that have been explained. Besides single expressions, all the difficult passages and constructions are explained by paraphrases; the substance of the text receives various illustrations; and, lastly, detailed summaries precede the separate lyrical poems and the sections under which the larger epic compositions are arranged, so that the connection of thought in the former and the course of the narrative in the latter case are both clearly brought out and the difficulties of interpretation reduced as much as possible in this direction also. The necessary clue to Middle High German metre is not wanting (though it is a question whether two-and-twenty pages is not more than is necessary for the general public), and the introduction to each poem discusses, at more or less length, according to circumstances, the life and times of the author, and the substance and bearing, literary, historical, mythical, or otherwise, of his work. It is evident, therefore, that every educated student of modern German, whether foreigner or native, may acquaint himself in these editions with the originals of the masterpieces of early German poetry, at a very trifling expenditure of labour. All the difficulties are cleared up by a series of writers who, like Professor Franz Pfeiffer, of Vienna, Professor Karl Bartsch, of Heidelberg, and their not less deserving colleagues, are taken from amongst the most accomplished students of early German.

A sufficient testimony to the opportuneness of the undertaking is to be found in the number of editions reached by most of the works of the series, which forms twelve volumes in all, though they can be bought separately. The first volume, containing the works of the famous lyric poet, *Walther von der Vogelweide*, which first appeared in 1866, reached a second edition in the following year, and by 1870 the two editions of nearly 4000 copies were exhausted, and

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after Pfeiffer's death, a third, superintended by Bartsch, made its appearance. That the poems of Walther should find that number of readers in the original language shows how widely these convenient editions must have circulated amongst the ordinary educated public (for the really learned cultivators of the study are to be counted by hundreds at most); and this notwithstanding the unavoidable difficulties of the original and the success of four editions of a very good translation by Simrock. The remaining eleven volumes contain the following poets and anonymous works: II. *Kudrun*; III. *Das Nibelungenlied*; IV.-VI. *Hartmann von Aue*; VII. VIII. *Gottfried von Strassburg*; IX.-XI. *Wolfram von Eschenbach*; XII. *Erzählungen und Schwänke* ("Tales and Jests"). The writers all belong to the first half of the thirteenth century, that is, to the golden age of old German lyric and epic poetry; and as they are more or less fully discussed in every history of the literature of the middle ages, I shall only notice a few points of detail.

With regard to Walther von der Vogelweide, the importance of his poetry to us lies, at least as much as in its intrinsic merit, in the glimpses into the political, ecclesiastical, and social conditions of his time which it affords; accordingly, a literature, abundant even to satiety, as Gervinus says in the last edition of his *History of German Poetry*, has grown up about him, and many various and extensive researches relating to his life and poems have been published, since the new epoch marked by Uhland's work on Walther in 1822, over and above simple translations and editions of the text. The subject-matter for such researches is not scanty, for besides the tender emotions of the heart, which are duly honoured by his muse, he was possessed by a much stronger and deeper passion, love of the Fatherland, for which no heart ever beat more truly. His voice was raised in defence of the honour of the emperor and the independence of the empire from foreign and illegitimate influences, and his most glowing strains sounded the praise and glory of Germany. In return for the favour of the Emperor Frederick II., who entrusted him with the education of his son Henry, he was always ready to assist his master with counsel or action, either exhorting him with words of encouragement not to succumb to the difficulties of his position, or detecting and denouncing the treacherous intrigues of the princes of the empire; or, again, with the generous daring of a man convinced of the justice of his cause, reviling the reprehensible and ruinous policy of the Roman court. An example of his *Sprüche* ("Political Poems") may be welcome, so we have chosen the following on the See of Rome. He compares Pope Innocent III. with Gerbert, afterwards Sylvester II. (999-1003), whose knowledge of natural history and mechanics caused him to be suspected of proficiency in the Black Art. But Gerbert (who, according to the legend, was carried off by the devil) only destroyed his own soul by his sorceries, whereas the present pope involves the whole of Christendom in his fall:—

"Der stoul ze Röme ist allererst berihtet rehte
als hievor bi einem zuoberaere Géfbrehte.
der gap ze valle niwet wan sin eines leben :
sô will sich dirre und all die kristenheit ze valle geben.
wan rieſent alle zungen hin ze himele wäfen
und frâgent got, wie lange er wolle schlafen ?
sie widerwükent siniu werc und velschent siniu wort :
sin kameraere stilt im sinen himelhort,
sh siener roubet hie und mordet dort,
sin hirte ist z' einem wolve im worden under sinen schâfen."

"The chair of Rome is only now right well filled, as heretofore by the sorcerer Gerbert: he, however, gave to destruction nought but his own one life, but this one will destroy himself and all Christendom. Why do not all tongues call to heaven, wo! and ask God how long He will sleep? They (the pope and his party) work against His works and falsify His word: His treasurer (the pope) steals from him His heaven-hoard (the treasure of divine grace); His peace-maker (the pope,

who ought to make peace, to pacify) robs here and murders there; His shepherd is become a wolf amongst his sheep."

This is certainly very vigorous language, and its application is not limited to Walther's age, any more than that of the next saying, addressed to the higher clergy of Germany and Italy, and beginning with the words—

" Ir bischow' unde ir edelen pfaffen, ir sit verleitet.
séht wie iuch der bâbest mit des tievels stricken seitet !" &c.

" Ye bishops and ye noble prelates, ye are led astray. See how the pope holds ye fast with the devil's meshes !" &c.

These specimens will be enough to raise the wish for a more intimate acquaintance with Walther.

We need say nothing of the *Nibelungenlied*, as the subject is sufficiently well known; in this collection it is edited, together with *Kudrun*, by Professor Bartsch. The latter, which has been called the *parhelion* of the *Nibelungenlied*, though less tragical than it, is likewise a powerful heroic poem. Its chief subject is the many combats attending the rape and recovery of Kudrun, a king's daughter in North Germany. This legend, of which the original substance is derived from Teutonic mythology, was known to the Anglo-Saxons, for the *Complaint of Deor* (eighth century) refers to one of the chief characters in it, the bard *Heorrenda* (in *Kudrun* called *Horant*); the same legend had been preserved, though with considerable alterations, in a Norse song on the Shetland Islands until last century.

The poems of Hartmann von Aue are edited by Professor Fedor Bech; they contain the epic narratives *Erec* and *Iwain*, both based upon old British legends, which may be illustrated out of Lady Guest's *Mabinogion* (*The Lady of the Fountain* and *Geraint ab Erbin*), though these versions are by no means among the most ancient; *Gregorius*, a mediaeval Oedipus legend, for Gregorius, without knowing it, marries his mother, but nevertheless, after long penance, is made pope; *Der arme Heinrich*, a legend, of which the source is unknown, telling the history of a leprous knight who is cured by the loving self-devotion of a young maiden; lastly, the *Songs and Booklets*, of which the first are love-songs, whilst the latter contain a monologue on love, and a dialogue between the body and the heart, on the question, which is the chief cause and which the chief sufferer from an unfortunate love. "Hartmann shows a rare mastery of style in all his works; no early German poet has equalled him in this respect, and none has thought out the subject of his epic poetry so thoroughly as he does."

The *Tristan* of Gottfried von Strassburg treats the same subject as the old English *Sir Tristrem*, edited by Sir Walter Scott, though there is no comparison between the poetical value of the two compositions. That of Gottfried possesses a gracefulness, an artistic beauty equalled by no other romantic poem of mediaeval Germany; in no other is there such a wonderful spiritual harmony between matter and form. We miss in this poet, it is true, the perfect simplicity and dignified clearness of his contemporary and model, Hartmann von Aue, and he is far from attaining the earnest moral severity and grandiose elevation of his opponent, Wolfram von Eschenbach, but he stands alone and unrivalled in the easy flow of his language, in pretty and ingenious playing upon words, thoughts, or images, and in the magically seductive and fascinating art of soul portraiture. This is the well-founded verdict of the editor, Professor Reinhold Bechstein, and it harmonizes completely with what other competent critics have said of Gottfried, whom even his contemporaries admired, praised, and imitated. In spite of particular objections, Gottfried, whose native town is now German once more, "is to be held in honour as one of the most eminent poets to whom Germany has given birth, and as a true classic of our ancient literature." The

ancient British framework of the Tristram saga is to be met with in nearly all parts of Europe; we find it in Provence, in Spain, in Italy, in Scandinavia, even in Bohemia, only not in Greece, as has been said by different historians of literature, and as even Bechstein seems to believe. The error probably owes its origin to Grässle's *Lehrbuch einer Literärgeschichte*, &c., vol. ii. part 3, p. 205, for the passage there quoted, "von der Hagen, *Minnes.* vol. iv. p. 607," only says that there is still in existence a Middle Greek rhapsody, taken from the legendary cycle of Arthur and the Round Table, in which Tristram appears as one of the chief knights of the Table; which is of course quite a different thing from this being the subject of an independent Byzantine poem.

We come next to Wolfram von Eschenbach, "universally admitted to be the deepest thinker and the most powerful of all the courtly narrative poets of mediaeval Germany. He alone has attempted to make the highest problems which agitate the human breast into a subject for epic poetry." With these words the editor, Professor Bartsch, begins his introduction to Wolfram's *Parcival* and *Titurel*, of which latter poem only fragments still remain. Both belong to the Grail cycle of legends, and to those Bartsch gives the necessary references, though enquiries into the origin of the legend are so far from being at an end that they have not hitherto led to any definite result. Oppert, for instance, whose essay on *Prester John* I noticed in the *Academy*, No. 17 (vol. ii. p. 122), in an excursus on the Grail, maintains that belief in its miraculous properties was derived from those which were popularly ascribed to Coral. Paulus Cassel (*Der Graal und sein Name*, Berlin, 1863) sees in the Grail and the food which it dispenses the *panes gradiles* of imperial Rome spiritualised, and so become a symbol of the Last Supper, and similarly *alii aliter*. *Parcival*, as Bartsch remarks, is a psychological epos, showing the inward development of man, as Goethe's *Faust* does in a dramatic form; like *Faust*, it is amongst the hardest of poetical works, and the more so since Wolfram's education was of the scantiest, scarcely coming up to the average standard of his time, so that the great soul, which is struggling to express itself, often finds a difficulty in attaining its purpose, and this occasions an obscurity of language which was made a reproach to him even by his contemporaries. Bartsch has done everything that was possible to reduce this obscurity, and the grateful reader will be able to judge by the few remaining doubts of the extent of his obligations to the editor. Still it cannot be denied that considerable patience, goodwill, and scientific zeal are needed to master all the difficulties which surround Wolfram's great spiritual epic, and that the *Tristan* of Gottfried von Strassburg will always be much more attractive than the *Parcival* to the majority of lovers of poetry.

The last volume of this collection contains *Erzählungen und Schwanke*, selected and edited by Professor Hans Lambel. These poems are the work of a tendency which we do not meet with until the full bloom of the popular and court epos has begun to fade, that is, towards the middle of the thirteenth century. They are, however, in the highest degree interesting and instructive, and they may attract, by their shortness, many readers who might be deterred from venturing upon the greater works. In any case, they form a suitable preparation for the study of early German literature in the original language; besides being connected by their substance, whether serious or jocose, to that cycle of fiction which, since the middle ages, has spread from the East into every part of Europe, and has penetrated so far into every section of society. Various reproductions in prose and verse, they procure us a degree of insight into the real life and

circumstances of different classes which the earlier poems, that do not leave the realms of imagination, are far from affording, and they are therefore at once amusing and instructive. From amongst the vast number of versified tales of this kind, Professor von der Hagen published a whole hundred in his *Gesammtabenteuer*, and Lambel has selected nine, in which these qualities are especially evident. The first is called *Der Pfaffe Ams*; the author, who had also produced a considerable number of such minor poems, was known as *Der Stricker*, "The Knitter," probably from the occupation of his ancestors. He here relates a series of swindling tricks played by an English priest (apparently from some place upon the Thames) in the course of his wanderings in different countries, after which he returned home, was made abbot, and died in the odour of sanctity. The narrative has probably an English original, but it has not yet been indicated. References, however, abound for the history of the single pranks of the priest, and may be found in Kemble, who also discusses *Der Pfaffe Ams* in his book, *The Dialogue of Solomon and Saturnus, with an Historical Introduction* (London: printed for the Aelfric Society, 1848). I may mention, in addition, that the first question put by the bishop to the priests, how much water there is in the sea, for which Kemble refers to Chaucer's *Second Merchant's Tale* (*The History of Beryn*), is also to be found in *Syntipas*, in *The Seven Viziers*, in the *Mischle-Sendabar*, in the *Life of Aesop* by Planudes, and in Plutarch's *Conviv. Septem Sap.* (c. vi.). *Der Meier Helmbreit* ("Farmer Helmbrecht"), by Werner the Gardener, depicts in the most lively manner the circumstances and incidents of life amongst the villagers of Bavaria and Austria, as (we gather from other contemporary accounts) they either were or may have been in the middle of the thirteenth century. This poem may be looked upon as one of the most interesting in early German literature, but I cannot refrain from regretting that another short poem, *Der Weinschwelg*, "The Tippler," was excluded from this collection on account of its not being in narrative form, but descriptive of the growing delight and growing powers of an invincible toper, as he drains glass after glass. It is a masterpiece of its kind, though unluckily the end is wanting, in which the drunkard fastens on an iron coat of mail lest his belly should burst, but perhaps in the end the coat of mail itself burst. Gervinus, speaking of this poem, observes "that there is nothing more disgusting than solitary swilling, and nothing so contrary to the proper destination of wine, to open the heart and heighten the common rejoicings." He adds, indeed, that the art of the poem is so admirable that one overlooks the ugliness of the subject, but he has himself overlooked the fact that there is nothing in this remarkable poem (as I shall show in detail elsewhere) to indicate a solitary toper, so that his reproach against it on this account appears to be unfounded. But to return to the volume under discussion. *Der Wiener Meerwart* ("The Voyage of the Viennese"), by Joyless, the name assumed by the poet, represents a company of tipsy citizens of Vienna, who begin to roll, and therefore imagine they are on board ship, and a storm is driving them hither and thither, so that they make great disturbance in the inn, and when they have slept off their carouse have to pay handsomely for all the damage they have done. The oldest form of this story is in Athenaeus (ii. 5, p. 37), where the scene of the adventure is Agrigentum in Sicily. I will end with the *Herzemaere*, "The Tale of the Heart," by Konrad of Würzburg, who is also known by other poems. This is the story of the lover of a noble lady, who, dying in the Holy Land, charges his squire to embalm his heart and bear it to her in a golden casket. When he is near her castle, her husband meets the messenger, takes the

casket from him, and makes his cook prepare the heart and place it before his wife. When she hears what she has eaten, she says that after tasting such precious food she will never eat again, and dies of a broken heart. The legend belongs to a very widely spread group, which is well known from the tragic fate of the Trouvère of North France, Reignault, chatelan of Coucy, and the lady of Fayel, and of the Troubadour Guillem de Cabestant. Of course this volume, like all the rest, is provided with introductions and other necessary explanations.

I have here briefly indicated the contents of this whole collection, and I trust that what I have said of it may help to procure it a friendly reception from those who, out of Germany, may wish to study the classical productions of our early literature without serious labour to themselves. In Germany, as has been said, these volumes met with such speedy and universal acceptance that another enterprise of the same kind has been begun. The centuries immediately before and after the classical period of early German literature present a series of poems which well repay a more careful examination, in spite of their inferior perfection. They stand to the bloom or noonday of that literature in the same relation as the first dawn of spring or morning and as a mild autumn or the afterglow of evening. Accordingly Professor Bartsch has undertaken, in the second of the above named collections, *Deutsche Dichtungen des Mittelalters*, to publish the most considerable of the poetical productions of these two periods, which offer some entirely new features; for the gradual rise of the healthy middle-class spirit of later times, which appears in the *Erzählungen und Schwänke*, and lends a fresh charm to poetry, enlarges the intellectual horizon by the introduction of didactic and satirical subjects, while the drama develops itself into a characteristic, truly popular form. Amongst the works proposed to be published are *König Rother*, Lamprecht's *Alexander*, Freidank's *Bescheidenheit*, Ulrich von Lichtenstein's *Fraudienst*, *Reineke de Vos*, &c., poems to the importance of which every history of German or of general literature bears witness. The plan of the new collection, in which Bartsch is assisted by the same eminent scholars as before, and by others, is nearly the same as that already described, except that the explanations of the meaning of words are less frequently given in the body of the work, while the glossary at the end is fuller. The first volume has already appeared, and contains *König Rother*, edited by Heinrich Rückert. It is preceded by a very valuable introduction, which, however, by comparison with the *Deutsche Classiker*, may be thought to go too much into details uninteresting to the general public. Rückert has forgotten what the former editors always bore in mind, that these editions are not intended for the learned classes, but for persons who will take less interest in acute but prolix researches into the rise and history of a given poem than in a concise account of the results arrived at; he also demands from his readers too exact an acquaintance with the heroic legends of Germany. It might also have been thought that Pfeiffer's essay, above noticed, on the pronunciation and versification of Middle High German in general, would be enough to satisfy the curiosity of the general reader, and that Rückert's twenty-four pages on the special metrical and linguistic peculiarities of the poem edited by him run the risk of being skipped even by those whose thirst for knowledge is strong enough to lead them to wish to read it in the original. But I may perhaps be mistaken as to the intention of this second collection, for it almost seems from the footnotes as if they were designed to lead the way to a more precise and thorough study of the early German language and literature.

FELIX LIEBRECHT.

Leighton's Works. Five Volumes. Longmans.

THERE are mountains and mountains, and there are mystics and there are mystics: it is only in Worcestershire that Malvern would pass for a mountain, and we might miss the real mystical elevation of Leighton if we did not look up to him across the dead level of eighteenth-century pietism, over which he towers with a modest dignity and sober grace to a really considerable altitude. An objective standard to measure spiritual force is unattainable and undesirable, and so far as an approximation to it is possible, it will be found not in a comparison of the heroes of the spiritual life with one another, but in a comparison of each with his surroundings. The real grandeur of a mountain depends quite as much upon its steepness as its height. These considerations are peculiarly relevant when we try to estimate the writings and character of a man like Leighton. His circumstances were unfavourable to the utmost exaltation of positive attainment, but they favoured both his reputation and his influence. In fact, it might almost be said that his life and his memory were the creatures of accident; or, rather, we should say that his lofty earnestness was a guarantee that he would be something, and that his simplicity left it to Providence to determine what. This union of receptivity and independence gives him an interest unique in its kind. A Covenanter who understood and practised the piety of the counter-reformation, an archbishop whose largeheartedness fascinated Doddridge, a humanist to whom Seneca was "the moralist," as Aristotle was "the philosopher" to St. Thomas and the Schoolmen, an enthusiast who before Coleridge sought the Platonic salvation in the Calvinist conversion—with so many attractions it is not wonderful that, though he is a spiritual writer, he should keep his place among the classics of an unspiritual literature. Indeed to mention this at all among his distinctions sounds like an anticlimax, though he divides the honour, for what it may be worth, with so great a name as Jeremy Taylor. He is like the—

"Western cloud,
All billowy-bosomed; overbowed
With many benedictions, sun's,
And moon's, and evening star's at once."

Of course, under the circumstances, it is difficult to tell what is the real natural colour of the cloud, and one can only conjecture that it must be a very pure delicate neutral grey: men are more individual than clouds; but Leighton's individuality is of a sufficiently neutral description: the only characteristic that is left when we have exhausted the generalities of saintliness is a sweet, wistful, importunate unearthliness. It is not that he is pining for the glories of heaven: though he speaks much of them, it is only to complain that we do not really desire them, to confess that we cannot imagine them; he has nothing of the fiery passion of mystics like St. Augustin or St. Theresa, nothing even of the hushed glow of the author of the *De Imitatione*, still less anything of the delicious dreamy fever of such writers as Herbert and Vaughan, who, one is tempted to think, found the pains of home-sickness pleasant enough. Leighton is one of the clearest and most practical of writers: one of the most reasonable, if we grant his premises; one of the most plausible, if we differ from him upon first principles. To borrow a distinction of Dr. Newman's, we might say that Leighton gave a "real assent" to the doctrine of the evil of the world that now is, while his assent to the doctrine of the better world to come, though it was given very heartily, and though it occupied very much of his thoughts, was only "notional" after all. He reminds us of one of the fathers of the desert who had a great reputation for wisdom, though he would never speak on any subject but the infirmities and

difficulties of monks. Of course all mysticism tends necessarily to a depreciation not only of ordinary knowledge, but of the intellect itself, but this depreciation may be either positive or relative ; the intellect may be cultivated in order to be exhausted before it is transcended, and this is the tendency of mystics like St. Augustin and Swedenborg ; or it may be neglected altogether, and this is the tendency of mystics like St. Francis and Boehme ; or it may be disciplined and yet despised, dismissed as an unprofitable servant, before its work is begun, and this is the tendency of mystics like St. Bernard, and the author of the *De Imitatione*, and Leighton. This temper, as we see in St. Bernard, may be compatible with the very highest degree of practical ability, with the most unfailing courage, with the readiest intelligence ; but it is not only the refinement and repose of the strong, it is also the deliverance and support of those who, without it, might be weak. As we look at Leighton's clear, soft, bright face, we feel that magnanimity and solidity were hardly his natural virtues. His life was a failure as far as influence or usefulness go, and he was not a man to console himself with either a high reputation or an easy conscience. He worked for many years as minister of Newbottle, and we do not read that he regenerated that highly favoured parish. He worked as Professor of Divinity at Edinburgh ; he formed a few pupils like Scougal, now forgotten ; otherwise he left the university as he found it. He worked as bishop and archbishop, and he did not pacify the Covenanters or save the episcopal establishment ; all he achieved was to get his clergy to agree in synod to vague good resolutions ; then in another synod the resolutions were renewed ; by the third synod Leighton was reduced to write hopelessly and beg they might be acted upon. He postponed his own ordination till he was thirty, because he had noticed that others began to preach too soon and went on too long. When he was meditating the resignation of his see, he apologized, in what was meant to be a farewell letter to his clergy, for troubling the synod with such a trifle. He might almost seem to have taken his own measure accurately. His real success was in the writings which he constantly refused to publish ; which he desired to have destroyed : and though these bear witness to his ineffaceable distinction, they bear witness to his limitation too. Not only do the same thoughts, the same phrases, the same quotations repeat themselves from one work to another, but in the *Commentary on St. Peter*, the work by which he is best known, whole pages are repeated with scarcely a variation. The explanation is obvious. Leighton only wrote for edification ; he brought in what he considered a useful idea or a telling sentence as often as there was a chance of its producing its effect. He had such a predilection for the First Epistle of St. Peter that he delivered his course of lectures on it more than once, and this is the reason that it is so much the most voluminous of his expository works ; either he or some admirers ran the MSS. of the successive courses into one, without a thought of suppressing the repetitions. When a man has his mind full of a limited number of thoughts, it is very much a matter of accident which passage of a book will remind him of one or other of them : and this is always Leighton's method as a commentator ; he simply uses his text as a kind of multiplying mirror to reflect from a number of different points the light that is burning within him. This makes him one of the most capricious of expositors, and, in one sense, one of the least satisfactory. He accumulated in his youth a stock of knowledge which was certainly remarkable, but he lived upon it without increasing it ; we should hardly be surprised to find that after he was settled at Newbottle he read nothing but his Bible and his commonplace-book. He

puts away everything that he can as a superfluity, and he positively resents anything like controversy. It would be unjust to call him a latitudinarian writer, but anyone who in an age of disputes indulges his impatience to place himself and keep himself at the centre of the narrowing circle of the undisputed is really doing the work of the latitudinarian whom he anathematizes. One reason why Leighton gave way to this temper so readily was, that opinion with him was so much a matter of obedience that it was really an impossibility for him to develop anything that a sturdy partisan could recognise as an honest manly conviction. This is the explanation of his position in the ecclesiastical politics of the time ; he did his duty as he understood it under both the presbyterian and the episcopal establishment ; and he endeavoured to convert and edify souls under both, without ever quite believing in either. Probably, though his belief in the Covenant was never more than second-hand, it was at one time less hesitating than his preference for episcopacy ever was. But he soon saw that the work of reformation was to be the triumph of a political party, not the elaboration of individual character ; he was disenchanted, and the intolerable pretensions, the insane, tyrannical pedantry of the sincere Covenanters, completed the work. Leighton found himself, like most other sensible men, in the ranks of the moderate party, which was managed by Shairpe, a clever, generous man of business, rather indecent than unscrupulous. If Shairpe was the support of this party, Leighton was one of its most conspicuous ornaments : the court had not made up its mind whether it wished or expected to rely upon energy or conciliation, but the latter alternative was the pleasantest ; and if anybody could conciliate, it would be a man like Leighton, who combined the charm of cultivated fervour with the charm of ascetic gentleness. It was inevitable that a bishopric should be pressed upon him : he had really no reason for declining except humility, and he was allowed to escape with the smallest and poorest. It gives the measure of his docility—perhaps we may say, of his scepticism—that he submitted to receive episcopal orders as deacon and priest with much less resistance than Shairpe, only stating his personal opinion that his presbyterian orders were valid so far as they went. He soon found that the character of Shairpe, who was headstrong, though not inflexible, and the vindictive passions of the selfish cliques which had the ear of the government, destroyed any chance there might have been of verifying a plausible theory to which he inclined—that a sort of modified episcopacy, with a synod to prevent a bishop from browbeating the clergy, and a bishop to prevent the synod from tyrannising over the laity, was upon the whole the system likely to work with least friction, and therefore with most edification. He found himself almost exactly in the position of an ecclesiastical Falkland converted to a cause whose success it was impossible for him to promote, and almost more impossible for him to desire. Falkland, at any rate, had the consolation of esteeming and pitying Charles ; he might hope for a soldierly death if a manly life were out of the question ; but Leighton had to work with Lauderdale, and as he had no enemies, could not hope to be shot like Shairpe. It only remained for him to retire and spend his old age in spiritual conversation, in occasional ministrations, in the daily occupation which took up more and more time, “of dressing and undressing his soul.” He died as he had wished, in an inn, a stranger and a pilgrim to the last upon the earth where he used to say it was beyond angelical obedience to live for ever. He was on a journey to London, in the interest of an unsatisfactory nephew : he was unmarried himself, and lived after he resigned his see with a widowed sister-in-law, who scolded him for his pro-

fuse charities, and asked him if he supposed he could have given away so much if he had had children of his own ; he replied, "I know not how it would be ; but I know how it ought to be—'Enoch walked with God, and begat sons and daughters.'"

There we have the whole man with his timid, wistful, rapturous unearthliness which, as has been said, seems to give the keynote of his writings. Their real value is that they illustrate a character which may have lessons, which has certainly a fascination even for those who do not care to acquire it, though it is only the last who can hope to understand it. The main outlines of that character as they strike an outsider have been sketched already. Perhaps the most curious of the minor traits is his hankering after the Vulgate ; he can never refuse to comment upon its rendering when it has a distinct set of associations, though he does not attempt to vindicate its superior accuracy. This is the more remarkable because he rejects with some disdain, not only the legend of the Three Kings, but also the mystical explanation of their gifts, which is found in almost all the fathers, and because he repeats the commonplace objections to popery with an air of calm conviction which is strange in a man who had learnt so much from papists. On the other hand, he uses St. Bernard and the *De Imitatione* as if the chasm of the Reformation had never yawned between : in many ways his whole turn of mind is mediaeval and scholastic, which shows itself in a taste for thinking by means of etymologies, a point of contact between him and Coleridge (it should be noticed that the etymologies are very fairly accurate). Other traits in his strictly theological writing may be marked in passing. He discouraged more and more decidedly, as he grew older, the craving for "assurance," which is always the crowning doctrine of pure and vital Calvinism, and he emphatically refused to answer the challenge in which all controversy tended increasingly to issue by producing a list of "fundamentals." Perhaps his pleasantest, though not his greatest, works are his academical addresses. The two most remarkable things in them are, first, the persistency with which he represents Christianity exclusively as a discipline of blessedness (and here he coincides with Locke, who escapes from scepticism by maintaining that God has given in Christ πάντα τὸν καὶ εὐρέθεα) ; and, secondly, his readiness to use the Neo-Platonists as authorities for the end, while denying them all knowledge of the way. Perhaps if he had maintained this exclusiveness throughout, he would not have committed himself to the Stoical precept of trying to fancy how we should bear trouble before it comes, though he is aware that at best there is something unreal in any victory that can be gained over imaginary antagonists.

We shall look forward with great interest to Mr. West's *Life of Leighton*, for which he has collected fresh materials ; and even the existing materials have never been adequately used. Much might be done even from internal evidence to elucidate the very curious problem of Leighton's relation to the Catholicism of the Continent ; and Mr. West's illustrations from the devotional literature of the counter-reformation, and from the Platonic pietists of the seventeenth century, show that he is on the right track. Perhaps, as this is the first edition in which anything except edification has been aimed at, we ought not to complain that much is still left for future commentators in the way of tracing both the extent to which Leighton borrowed from others, and the extent to which he repeated himself. It is to be regretted that the theological prepossessions of the editor have led him to ignore the great contemporary Scotch mystic, "sweet Samuel Rutherford," who deserves his name in spite of unmistakable narrowness and occasional coarseness. Of

Leighton's own career as a Covenanter, Mr. West speaks with laudable moderation ; and one new view of considerable importance is put forward : many sermons are assigned, on internal evidence, to the periods of Montrose's campaign and Cromwell's domination, which had hitherto been assigned to Leighton's episcopate. The theory is ingenious, and a very little additional evidence, which perhaps the *Life* may contain, might make it certain.

G. A. SIMCOX.

LITERARY NOTES.

Charles Lever, the indefatigable novelist, has died at Trieste, in his 67th year, prematurely, we might say, judging from the unabated vitality and buoyancy of spirits evidenced in his latest works, though viewed as the author of *Harry Lorrequer* and *Charles O'Malley*, our surprise is, perhaps, rather to find that he has not been with us longer. They belong to the boisterous, inorganic type of fiction, of which Smollett is the great representative ; and though they can still be read with amusement, their humour requires to be supplemented by a virtuous consciousness, that one is studying in them an instructive phase in the history of light literature. Lever became popular as a painter of Irish character, and yet no successful novelist ever troubled himself less about character, properly so called. He could tell one good story after another so volubly as to keep up an unbroken chuckle from the first chapter to the last, which stood in lieu of a coherent plot, while his heroes fell in love and out, and won and lost fortunes and battles neither he nor they much cared how or why. But unity of purpose, action, or conception, were not natural to his novels, and when he changed his style, a quarter of a century ago, it was because a fine tact warned him that, for better or worse, the public taste was no longer what it had been. His least successful and characteristic works belong to this period, when he aimed at constructing an ordinary novel of incident without a thoroughly congenial or inspiring motive. In 1858 he became vice-consul of Spezzia, and about that time he hit upon a new vein, which, with varying but considerable success, he continued to work until his death. Instead of the rollicking, happy-go-lucky Irishman of his early works, his hero is henceforward a deep diplomatic conspirator, generally belonging to an obscure nationality, but exercising as mysterious a sway over the fortunes of Europe as any of Mr. Disraeli's magnates. This new type is not more faithful to nature, nor of more permanent artistic value, than the wild Irishman of whom the public had got tired ; but Lever's knowledge of the travelling Briton, who is at once his butt and his public, his unflagging spirits and lively invention, which disguise the essential sameness of his subject, were quite enough to account for his fresh success. Without being profound or veracious, he was almost always readable, and it does not detract from his merit that he attained this result by trifling with such contemporary foibles as a taste for ethnological "questions."

The *Cornhill* reprints the substance of a paper read before the Royal Geographical Society in March, by W. G. Palgrave, giving an account of his travels in North-East Anatolia, in 1870, with special reference to the traces of glacial and volcanic action, and to the unexplored mineral riches of the country.

A paper by B. Delbrück, on German Rhyme, in *Im Neuen Reich* (May 31), traces the change from alliteration and assonance to regular rhyme to the growing disposition to place the accent on the root syllable. The Greeks did not use rhyme, because their accented syllables were higher in pitch, not louder or more emphatic. Classical Latin eschewed rhyme for the very reason that recommended it to the barbarian clergy ; rhyming syllables were plentiful, but they were mostly terminations, and therefore empty and insignificant. Italian and the other Romance languages do not derive the full benefit from the use of rhyme for the same reason, and English is even richer than German for poetical purposes, because the disuse of case-endings, &c. leaves so many words reduced to one accented significant root syllable.

The historical *Kreisverein* of Swabia and Neuburg—a society which devotes itself to collecting and bringing to light documents bearing on the history of domestic manners rather than political and military operations—has just published a curious *Tour in the Netherlands*, by a military chaplain, in 1651, found in MS. in the library of Augsburg, and containing very lively pictures of the state of things during the Thirty Years' War.

Dr. J. A. Messmer writes to the *Allgemeine Zeitung* (June 1) to announce the discovery of the bronze gates of Byzantine workmanship belonging to the ancient basilica of St. Paul at Rome, which were supposed to have disappeared since the church was nearly destroyed by fire in 1823. The gates, which have been preserved in the adjoining Benedictine convent, are uninjured, and will be restored to their proper place when the church is rebuilt.

The death of F. Gerstäcker, the well-known traveller and *littérateur*, is announced, together with that of Julius S. v. Carolsfeld, the early colleague of Cornelius. The fate of Hippolyt Schaubert, also lately deceased, should be considered by those who believe that there are better tests than popular favour for discovering and rewarding literary merit. In 1867 a prize was offered by Friedrich Halm (Freiherr v. Münch-Bellinghausen) for the best comedy, and was won by *Schach dem König*, the work of an unknown police clerk. Scandal said that the adjudicators believed that they were crowning the work of Rudolf Gottschall, but even if the mistake was made, it was still sufficiently flattering to Schaubert, who "woke and found himself famous." Unfortunately, neither the critics nor the public were induced by this *quasi* official triumph to believe that all the past, and, still less, all the future, works of the poet were titles to immortal fame. Some of his smaller comedies had a complete success, but apparently rather in spite than because of the higher ambitions which he had been led to entertain.

Art and Archaeology.

THE PARIS SALON, 1872.

THE reaction of events, the depression and fatigue of the general mind, make themselves felt sensibly enough in the current official exhibition of the French arts in the Champs Elysées. The formal revival is spirited and complete; the universal resumption of artistic activity and production is nothing short of amazing; but it is none the less true that the activity seems to carry marks of deterioration and distress, and the production seems mostly of impaired quality or unsatisfactory kind. In a word, it is not a good Salon, and can scarcely be thought good, except in the eyes of such as are sworn *a priori* to official admiration of whatever may be the results of the last new régime. That the new régime of the Fine Arts in Paris—by which, pending the future of emancipation and private initiative which we are assured is in store for them, the Fine Arts are laid more strictly under State control and regulation than ever—that this régime has done much immediate harm to the exhibition can perhaps hardly be demonstrated. Artists rebel, and justly, against the change of rule which puts the election of the annual jury into the hands of those exhibitors only who have already won prizes or decorations, instead of the whole body of exhibitors as heretofore. That is a rule evidently tending to officialism, fogyism, academism—the principle, call it what you will, which is not unknown under another system nearer home, and which is apt to exclude or repress the efforts of originality and manifestations of the younger artistic mind. And the aspect of the Salon this year is by common consent "official"—unoriginal, with a few ambiguous exceptions, of which anon. Still, one does not hear of any specially unjust or notable exclusions, except that of Courbet out of intestine vindictiveness, and that of two painters of war scenes—one of them excessively skilful—under foreign pressure. The abstention of J. F. Millet, the foremost European painter (and poet) of country life and sentiment; of Stevens, the greatest master of tone and texture in modern interiors; of Bonvin, the strongest of the younger school of still-life painters, and of more notorious masters such as Gérôme and Meissonnier, is due to different causes; but a French exhibition of to-day from which these painters have

abstained, and which contains no remarkable new appearance, while it excludes a painter so powerful in his art as Courbet, and so instructive even in his perverse extremes, must needs be a comparatively tame and unattractive one.

It is scarcely worth while to chronicle the more or less fully accomplished inanities, whether according to the voluptuous, the elegant, or the severe routines of traditional practice, which occupy upon the walls a space quite out of proportion to the attention they command. The "Cigale" of M. Lefebvre, a regulation nudity with blue-black hair and almond-shaped eyes (destined, we believe, for the English market), may count as a leading example of the first class, and save the mention of a hundred other nudities and more, varying only in the forms and attitude of the model, little or not at all in sentiment and significance. One other only, "Le Sommeil," by M. de Gironde, a pupil of Gleyre and Bonnat, may be noticed as a *début* of vigour and promise in its way, quite unconventional in treatment, and really rich in colour and handling. The second or elegant convention finds its leader in M. Bouguereau, with a life-size woman-reaper whetting her scythe, and an idyllic harvest party—both perfectly unreal and full of graceful vapidity and nicely trained artifice; unless indeed a more distinguished name were chosen, and the perfectly feeble and characterless "Giacomina," a costumed portrait of Cabanel, were pointed out, as one of the least fortunate of its painter's efforts. Then there are large "Temptations of Christ" which nobody looks at; large mythologies of "Herakles with the Hydra" (Bin, 143), and "Nessus with Deianira" (Tillier, 1454), which are not good either; an ambitious allegorical "Fortune" of M. Sirovy, which is showy and well-placed, but destitute alike of taste and imagination; an immense "Massacre of the Innocents" by Gustave Doré, invented with some power and originality of that now rather threadbare order which we know so well, coloured and carried out with even more than his usual disagreeable technical incompetence. Upon the whole, we note a considerable tediousness and decrepitude in all the higher, the more ambitious, manifestations of the painter's art; nothing which can be said to belie the exhaustion which one has long traced growing upon both the romantic impulse in serious French figure-painting which starts from Delacroix, and the classical impulse which starts from Ingres. On the other hand, the realistic impulse, which finds its central embodiment in Courbet, is not fairly represented; and M. Jules Breton, who has done some such tender and touching, although unequal, work in the realists' especial field of rural life and labour as they are, leans this time unfortunately to a weak and scarcely sincere convention. Both his pictures seem too large for his strength; the colour of their cold foliage-greens and cold drapery blues or violets is unpleasant, and the modelling and design of the peasant-girl figures, nearly life-size, is neither very frank nor very correct: it is not a good year for M. Breton, in spite of his conspicuously. M. Manet, the well-known and much-contested talent who represents in an extreme form, and with an executive bravura which is his own, the logical doctrines of the more violent realists—modernists—has no figure-piece in the Salon; only a sea-view, with the fight of the *Kearns* and *Alabama*; the deep blue-greens of the sea, the blacks of the ships' hulls and smoke, the tones of the sky, are seized with a forcible precision, and struck upon the canvas in rough traits which disguise a good deal of real subtlety, both in colour and drawing, under a wanton manifestation of slapdash. Richness and pleasantness in the actual management of paint are things sought by few French artists; and among these few M. Bonnat has a right to count; but in the clever Oriental piece, "Cheiks d'Akabah," he exaggerates this aim, and makes an excessive impasto cover real defects of thoroughness, a strained monumentalism of arrangement and composition serve instead of real dignity of drawing. Very much better, and powerful both in character and colour, is his portrait of an old woman of the Basque province (163). M. Gérôme finds an imitator, if not a substitute, in his pupil Lecomte du Nouy, whose picture of a Pharaoh receiving evil tidings, of which he imperturbably decapitates the bearers one after another, has a good deal of the master's power and accuracy, as well as more than enough of his cynical imagination and cruelty. A second (and this time a draped) "Sommeil" on a large scale—it is a young mother and child solidly painted, with rich coloured reddish and greenish coverings—has to be noticed as a first and considerable success by a pupil of Gleyre, M. Eugène Lecadre.

Turning to decorative ideals, the "Idylle" of M. Henner and "Espérance" of M. Puvis de Chavannes furnish two very opposite kinds of example. M. Henner is an Alsatian artist almost as well-known for frigid academical composition as for charming and spirited portraits of children which do not look as if they could be done by the same hand : this "Idylle," however, is neither one nor another, but a little classical dream of two naked women by a well on a hill slope, conceived in a fresh and simple spirit, and not only well drawn, but charmingly painted in an original key of pearly colour. M. Puvis de Chavannes' work is always flatly tinted, more in the manner of tapestry decoration than of oil-painting ; he has a refined sense of colour, and a certain fanciful rigidity and archaism which remind one of some English contemporaries; this "Hope" is not a successful example. M. Ernest Aubert may be remarked, with his "Fil rompu," as a fair follower in the decorative path of Hamon ; also the "Eve" of M. Laurent Bouvier. One of the very good pictures of the year, in a direction rather English as one would say, is the "Heure de la Marée" of M. Billot ; a Normandy sea-side, with the fisher population among their beached boats inspecting and collecting the haul ; very pleasant colour and spirit in the men, women, and children, with nice oppositions of rosy cheeks and blue jackets, and a quite natural and unforced sense of life, movement, and sea-swell.

Genre-painting, says current criticism, and not history-painting, is the strength of this year's Salon. Yet it does not contain much that is really remarkable in the way of *genre*: there is M. Caraud, of course, with his clever soubrettes in costume ; there are some, but not many, of the followers of Alfred Stevens. The three names that I should be inclined to select in this field are the little known ones of M. Léon Saunier, whose two little out-door lady groups are painted with some discordance of tone, but with an extreme delicacy of drawing and expression, and a charming adjustment in their backgrounds of landscape ; M. Claude, who sends the best Rotten Row scene of any that has been attempted—it is quite small, but catches admirably the pictorial effect and sentiment of the scene—and a careful and brilliant little interior, "l'Antichambre," with a lady and dog ; lastly, M. Chenu, who has caught some provincial bourgeois types with great spirit and accuracy, and set them to drive a-visiting in a sunny weather, of which he renders the effect admirably. So is M. Jules Hérau's "Omnibus Station at Batignolles" an excellent piece of its kind.

There remain the class of war pictures, the class of landscape, and the class of portraits (and the sensation of the year has been made by a great pair of portraits) : these, together with the sculptures, must be reserved for another number.

SIDNEY COLVIN.

ART NOTES.

Under the title, *Histoire de l'Ornement russe du Xe au XVI^e siècle*, a work is in course of publication which is of considerable importance in a special department of art. It consists of a collection of initials and other examples of ornamental design selected from Byzantine and Russian MSS. and printed in colours. The collection is arranged in chronological order, and accompanied by an explanatory and historical text. The Russian government, besides contributing a considerable sum towards the expenses of this very costly undertaking, has subscribed for 500 copies. Two hundred only come into the market, and may be procured from A. Morel, Paris.

In the present number of the *Zeitschrift für bildende Kunst*, Dr. Engelman continues his valuable notice of the recent excavations in Pompeii and Herculaneum ; Professor Conze contributes a notice of an early Christian sarcophagus discovered at Salona, and now placed in the museum at Spalatro ; and Carl Klaus concludes his paper on the contemporary school of sculpture in Dresden.

M. Léopold Flameng, who is well known by his excellent work in the *Gazette des Beaux-Arts*, has undertaken to illustrate a forthcoming edition of Victor Hugo's *L'Année terrible*.

The first part of Lübke's *Geschichte der deutschen Renaissance* has now appeared. After an introductory chapter, the

author passes into the description of the commencement of the new style amongst the painters and sculptors of the sixteenth century, and closes with an analytical examination of German Renaissance architecture. The next three numbers will treat of the now remaining monuments arranged in topographical order. It is expected that the entire work will be out before the end of the year.

The exhibition of the competitive designs for the German Houses of Parliament was opened at Berlin on May 2. There are fifteen English competitors, amongst whom we find the names of Gilbert Scott, Godwin and Edis, Kerr, Emerson, Turner of Dublin, W. W. Robertson, S. Williamson, and others. The accepted plans, we now learn, are those of an architect of Gotha ; Mr. Gilbert Scott and Mr. J. Scott being bracketted second.

The miniatures of the Allègre collection were sold on May 14 and 15. A very fine miniature, on vellum, by van Blarenbergh (signed and dated 1763) ; 30,100 frs. The subject was the "Foire de Saint-Germain."—Collection Sampayo : An oval miniature, on ivory, by Hall, representing the artist's wife, sister, and child ; 19,000 frs.—Sainte sale and collection Daugny : Oval miniature, on ivory, by Fragonard, the portrait of a boy in harlequin's costume ; 3320 frs. A small round miniature, on ivory, by Hall, in a gold locket, the portrait of the celebrated Sophie Arnould ; 2120 frs. Miniature portrait of the no less celebrated Mdlle. Du Thé, by Augustin ; 4300 frs. "Le Triomphe d'Amphitrite," and "La Toilette de Venus," by Charlier ; 6850 frs.—Collection Hope : Oval miniature, by Sicardi, "Harlequin and Columbine" ; 6020 frs.—We find that the best of the Roëll-Hodshon collection will find its way to England. Sir Richard Wallace is said to have been the principal purchaser. To him fell the gem of the collection, the "Interior of a Church," by Emanuel de Witte, the price of which, 29,700 gulden, can hardly be considered out of the way, though it is perhaps ten times as much as any picture of de Witte's ever before reached. Sir Richard also became the possessor of the fine "Wooded Landscape," by Hobbema ; of the "Boeren Binnenhuis," by L. Bourse (dated 1556) ; and of the very fine female portrait by Netscher. This last went for the very moderate sum of 660 gulden. A far inferior example of the same master, "Four Children on a Balcony," was bought by Mr. Holloway for the absurd price of 16,610 gulden ; but he acquired a first rate van de Velde, of his early period, "Still Sea, with Ships," for 14,550.

The new number of the *Jahrbücher für Kunsthissenschaft* (May 10) opens with a series of corrections and amplifications to the *Cicerone* of W. Burckhardt, by Dr. W. Bode. Travellers using the *Cicerone* as a guide-book (and for travellers in search of art it is the best and indeed the one guide-book) will do well to furnish themselves with this appendix ; and such an appendix, by so well qualified a hand as Dr. Bode's, might usefully be repeated at intervals. The necessity for correction lies rather in re-arrangements or new discoveries of works of art—sometimes, unluckily, in their decay—than in original errors or oversights of description. Florence, where so much has lately been done for the preservation and exhibition of treasures, takes naturally the largest place.—The same review contains a discussion of W. Schmidt on the signatures and attributions of doubtful pictures in the galleries of Munich and Schleissheim, and a chapter of *Holbeiniana* by the same writer, going minutely over the much trodden ground, and deciding on the whole for the date 1517 instead of 1514 (which, is the question) as that of the elder Holbein's departure from Augsburg.—But the most important piece in the number is the set of unpublished documents in relation to the building of the cathedral at Siena, drawn by Mr. Charles Eliot Norton from the archives of the city, and here printed by him with a running commentary. The eight documents run from 1260 to 1388, through the greatest prosperity of the city down to its decline, and the consequent abandonment of the scheme for turning the existing cathedral into the transept of a vaster new one, which resulted after the devastations of the plague in 1348. They constitute as complete and minute a picture as exists, both in spirit and detail, of the mode in which the great monuments were undertaken and carried on by the civic bodies of the middle ages and their workmen ; and Mr. Norton's observations are thoroughly luminous and intelligent.

Apropos of the completion of Theodor Grosse's frescoes in the Leipzig museum, Herr Max Jordan, the German translator of Crowe-Cavalcaselle, takes the opportunity of giving (*Im Neuen Reich*, 22) an essay on the art and history of fresco-painting generally, justly enough claiming for his countrymen since Overbeck and Cornelius the credit of having stood alone as revivers of the pure practice—*buon fresco*—and ranking Theodor Grosse as one of the most distinguished of their successors. The artist has filled the vaulted divisions of a hall of moderate dimensions with an abundance of mythological, allegorical, and historical inventions—the successive incidents of the Mosaic Creation, the Birth of Eve, the Fall, the Expulsion, Michael overthrowing Satan, the Four Great Seers of the Old Testament; elsewhere Eros and the Graces, Imagination riding upon a Sphinx, the Fates, the Virtues, Egypt representing Architecture, Greece, Sculpture; Italy, Painting; and Germany, Music.

The *Chronique des Arts* relates the improvement made in the arrangements of the local museum at Orleans since the appointment of its new director, M. Eudoxe Marcille, the distinguished amateur who, with his brother (director of the museum of Chartres), possesses by inheritance the choicest as well as the largest extant collection of the French masters of the eighteenth century.

The snuff-boxes and bonbon-boxes of the Allègre collection have been sold at the Hôtel Drouot with great success, at prices ranging from 4,000 to 25,000 francs.

In a pamphlet recently published at Vienna, entitled *Eine Studie über chinesische Emailvasen*, M. Lippmann, its author, traces in an interesting manner the art and manufacture of Chinese pottery, from the days of the Shang Dynasty (1743-1112 B.C.) to comparatively modern times. Native archaeologists have devoted much time and labour to the exploration of the same field, and the existence of numerous works on the subject, notably the *Po-koo-too*, in sixteen large volumes, and the *Se-sing-koo-keer*, in forty-two folio volumes, attests the scholarly and imperial interest taken in this branch of antiquarian research. From both of these works M. Lippmann has drawn much of the valuable information contained in his pamphlet, and from their numerous illustrations he has reproduced a few engravings of typical specimens of the art. But M. Lippmann has also studied the art in Europe, and is thus enabled to furnish us with a considerable amount of original matter. In common with other writers, he looks upon "chinesische Emailleerie als Tochter der byzantinischen Emailkunst."

Music.

THE WAGNER FESTIVAL AT BAYREUTH.

Bayreuth, May 22.

IT is now scarcely ten years ago since Wagner, in the preface to his dramatic version of the *Nibelungen Saga*, first hinted at the possibility of having his great work performed by the voluntary assistance of his nation. The chances of such an enterprise were at that time the most unfavourable that could be imagined. Although the success of Wagner's first three operas, wherever they had been adequately performed, was an undeniable fact, still his more advanced ideas of the fundamental reorganization of the music-drama had found so little responsive sympathy amongst the German nation—if such a nation could be said to exist at all—that the utter derision with which Wagner's appeal was received by the hostile press seemed but too well justified.

Amongst the causes which have removed all these obstacles and now assembled a crowd of enthusiastic admirers at Bayreuth, I would mention—besides the irresistible power of his genius as realised in the successive works of Wagner—the great political events of the last two years, in which the various German tribes, so long divided by internal animosities and party struggles, have at last recovered the feeling of solidarity. For a philosophic people like the Germans there soon arose the necessity of symbolizing the newly recovered political unity in a work of artistic import; and it was therefore only natural to see the best amongst the nation turn towards the purest sources of old Teutonic inspiration as Wagner has embodied them in his grand dramatic work.

The master's call therefore for the means necessary to secure a worthy performance of his *Nibelungen* drama was responded to with a most promising willingness; and it was the laying of the foundation-stone of a theatre to be erected for the purpose that had assembled the friends of Wagner from all parts of the world.

I shall not intrude upon your space with a description of the ceremony, which proved a failure because of a most pertinacious rain, nor of the banquet, the horrors of which from a culinary point of view would be scarcely realisable to the English mind. The programme of the concert which formed the most interesting feature of the Bayreuth festival consisted only of the Ninth Symphony of Beethoven, preceded by Wagner's *Kaisermarsch*, the latter being chosen mainly as a representative embodiment of German national feeling. With great tact Wagner had refrained from entering into competition with Beethoven's gigantic work, and concentrated all the energy of his mind in the service of doing justice to the great teacher's aspirations. At the same time the choice of Beethoven's Symphony in D Minor was the most appropriate that could be made on this occasion, because it forms as it were the foundation of the great development of modern German, and especially of Wagner's own, music. The principle of this new phase in art, as the present writer has expressed it on former occasions, is the demand for a poetical basis of music; that is to say, a latent impulse of passionate inspiration which guides the composer's hand, and the conditions of which are in themselves by far superior to the demands of music in its independent development. The rules arising out of these demands are in the Ninth Symphony violated, indeed completely overthrown, with a freedom of purpose and grandeur of conception that can be explained only from Beethoven's fundamental idea as it gradually rises to self-consciousness in the words of Schiller's ode *An die Freude*. In his celebrated programme to the Ninth Symphony, which Wagner wrote five-and-twenty years ago, he has interpreted Beethoven's poetical intentions by illustrative quotations from Goethe's *Faust*, connecting in this way the two greatest works that German genius ever conceived. He there declares this symphony to be the struggle of the human heart for happiness. In the first movement this longing for joy is opposed and overshadowed by the black wings of despondency. In the plaintive notes of the orchestra we hear the sad burden of Faust's words:

"Entbehren sollst Du, sollst entbehren."

The second movement, on the other hand, with its quick and striking rhythmical formation, describes that wild mirth of despair which seeks respite and nepenthe in the waves of physical enjoyment. The trio again might be considered as a dramatic rendering of the village scene in *Faust*. The adagio, with its sweet pure harmonies, appears after this like a dim recollection of former happiness and innocence—

"So sad, so strange the days that are no more."

In the fourth movement at last Beethoven leaves the limits of his own art entirely. The repetition of the main motives of the foregoing movements, always interrupted by the tremendous recitative of the double basses, is absolutely unexplainable from a purely musical point of view. It is the highest effort of dramatic characterization instrumental music has ever made, and seeing that it has reached the limits of its own proper power, it has to call the sister art of worded poetry to its aid. Beethoven has done this in a way "in which," to speak with Wagner, "we do not know whether to admire more the master's bold inspiration or simple *naïveté*." To the grand choral piece which follows, the words of Schiller's ode form the best comment. It is obvious how the introduction in this way of words as the necessary complement of musical expression even at its climax of perfection became the stepping-stone to the further development of poetical music as we discern it in what is generally called the "music of the future." It is equally clear that it requires more than the common intellect of the general run of conductors to grapple with the intellectual (not to speak of the musical) difficulties of such a work. Hence there is scarcely another composition in existence which has been injured so much by the traditional routine of musical philistinism. I candidly confess that, although I have heard the Ninth Symphony at least three score and ten times, I never quite understood its wonderfully grand and harmonious structure till to-day. Wagner indeed seems the born interpreter of this monumental work of musical genius. With a wonderful power of congenial receptivity, he conceives the grand intentions of his master Beethoven, and moreover he is in a most eminent degree a conductor. It is difficult to say what are the mysterious conditions of musical leadership; they are certainly nearest akin to the qualities of a great military commander; and one

can only agree with good old Emperor William, who, himself entirely innocent of musical knowledge, said after Wagner's late performance of Beethoven's C Minor Symphony, at Berlin, in his homely way : "Now you see what a good general can do with his army." It is indeed one of the most interesting sights to see the immediate *rappor* established between Wagner and his orchestra as soon as he raises his baton. Each individual member, from the first violinist to the last drummer, is equally under the influence of a personal fascination, which seems to have much in common with the effects of animal magnetism. Every eye is turned towards the master ; and it appears as if the musicians derived the notes they play not from the books on their desks, but from Wagner's glances and movements. I remember reading in Heine a description of Paganini's playing the violin, and how every one in the audience felt as if the virtuoso was looking at and performing for him or her individually. A gun aimed in the direction of many different persons is said to produce a similar illusory effect ; and several artists in Wagner's orchestra and chorus assured me that they felt the fascinating spell of the conductor's eye looking at them during the whole performance. Wagner in common life is of a rather reserved and extremely gentlemanly deportment ; but as soon as he faces his band, a kind of demon seems to take possession of him. He storms, hisses, stamps his foot on the ground, and performs the most wonderful gyratory movements with his arms ; and woe to the wretch who wounds his keen ear with a false note. At other times, when the musical waves run smoothly, Wagner ceases almost entirely to beat the time, and a most winning smile is the doubly appreciated reward of his musicians for a particularly well executed passage. In brief, Wagner is as great a virtuoso on the orchestra as Liszt on the pianoforte, or Joachim on the violin.

The result of this masterly performance of the Ninth Symphony will, we have no doubt, be a very beneficial one, the more so as many of the most eminent artists and conductors of Germany were present amongst the audience or performers. We mention only the names of Messrs. Riedel and Swendsen from Leipzig, Cornelius from Munich, Richter from Pesth, and Dannreuther from London. The solo-quartett consisted of Messrs. Niemann and Betz and Mesdames Lehmann and Jachmann-Wagner.

To judge from the energy of Wagner, and the admiring devotion of the whole audience, as shown on this occasion, the final success of the master's grand scheme may be expected with certainty.

I shall take an early opportunity of pointing out the more striking differences between Wagner's interpretation of the Ninth Symphony and the traditional way in which this work is generally performed both in Germany and in this country. This, however, cannot be done without frequent references to score and metronome, and would therefore exceed by far the scope and limits of this letter.

F. HÜFFER.

NOTE.

Liszt's Concerto for Pianoforte in E Flat was performed with great success at the Sixth Philharmonic Concert, by Mr. F. Hartvigson. This is the third time that the work has been played in London, and by each consecutive hearing it seems to gain more and more upon the audience. The genuine and unanimous applause which rewarded Mr. Hartvigson's brilliant rendering at the most conservative of our musical Institutes seems indeed to indicate a strong current of public opinion in the direction of more advanced art-tendencies. It might be interesting from a psychological as well as from a musical point of view to draw a parallel between the three excellent pianists to whom we owe the reproduction of Liszt's work within the last two years. As far as brilliancy of technical execution and verve is concerned, Mr. Hartvigson need not shun a comparison with either Mr. Bache or Mr. Dannreuther, while we sometimes missed in his playing that poetical appreciation of the finest intentions of the composition which more than fully make up for what the latter artist may here and there want in physical strength. In Mr. Bache we most admire the firm grasp of the whole rhythmical and melodic purpose of the work, as shown in his masterly way of phrasing and declaiming the single musical passages. During the whole performance on Monday we remarked a slight tendency (we must suppose on the part of the conductor) to take the tempo in the cantabile passages too quickly, while Mr. Manns, at the Crystal Palace performance, seemed rather inclined to do a little too much in the other direction.

New Publications.

ATLAS der Griechischen Kunstmystologie, herausg. v. Joh. Overbeck. Erste Liefg. Tafel I.-V. Leipzig : Engelmann.

BROWNING, R. Fifine at the Fair. Smith, Elder, and Co.

CONINGTON, J., Miscellaneous Writings of the late. Ed. by T. A. Symonds ; with a Memoir by H. J. S. Smith. Longmans.

EREWHON ; or, Over the Range. Trübner.

GOVER, C. E. The Folksongs of Southern India. Trübner.

HAWTHORNE, The late N. Septimus : a Romance. King.

JACKSON, Sir G., Diaries and Letters of ; from the Peace of Amiens to the Battle of Talavera. Ed. by Lady Jackson. 2 vols. Bentley.

KOBERSTEIN, A. Grundriss der Geschichte der deutschen National-literatur. 5. umgearbeitete Auflage v. K. Bartsch. 1. Band. Leipzig : Vogel.

MAGYAR NÉPKÖLTÉSI gyűjtemény a Kisfaludy Társaság megbízásából szerkeszik és Kiadják Arany László és Gyulai Pál. (Collection of Hungarian Popular Poetry.) Pest : Athenaeum.

MENDELSSOHN-BARTHOLDY, Karl. Goethe and Mendelssohn (1821-1831). Translated with additions by M. E. von Glehn. Macmillan.

PALGRAVE, W. Gifford. Hermann Agha : an Eastern Narrative. King.

SCHNORR V. CAROLSFELD, F. Zur Geschichte d. deutschen Meistersangs. Notizen u. Litteraturproben aus den Dresdner Handschriften d. Hans Sachs u. anderer Meistersänger. Berlin : Lobeck.

VISCHER, Fr. Der Krieg u. die Künste. Stuttgart : Weise's Hofbuchung.

Philosophy and Physical Science.

Darwinism in Morals, and other Essays. By Frances Power Cobbe. Williams and Norgate.

THIS book consists partly of popular essays on religious history and biography, and partly of discussions which, without being less popular in tone, have a more scientific aim, and show more independent thought. Among these latter is the essay which gives the title to the book. Miss Cobbe, while welcoming Evolutionism as rather helpful than hostile to religion properly understood, attacks Mr. Darwin's special view of the evolution of morals : under two heads, "first, his theory of the nature of conscientious repentance, which represents it as solely the triumph of a permanent over a transient instinct ; secondly, his frank admission that though another animal, if it became intelligent, might acquire a moral sense, yet that he sees no reason why this moral sense should be the same as ours." On the former point Miss Cobbe argues effectively, first, that the peculiar quality of Remorse (as distinct from regret) is unexplained ; and, secondly, that the being in whom "instincts of sympathy and goodwill to his fellows" are normal and selfish impulses exceptional is scarcely ancient—or even modern—man, as history shows him. There is probably some carelessness of statement in Mr. Darwin's exposition of his own theory. If in the "permanent social impulse" we include not merely goodwill towards other men, but also desire of their approbation and dread of their displeasure both in itself and its consequences (not omitting the displeasure of superhuman beings), the view becomes more plausible. And Mr. Darwin seems to have intended to include these, as Mr. Spencer and others have expressly done. On the general subject of evolution in morals, Miss Cobbe's remarks, though intelligent and often eloquent, seem to involve one or two common confusions of ideas. First, the unhappy ambiguity of the term "Utilitarianism" leads her to confound the derivation of the *form* of duty (with the peculiar emotions that accompany it) from experiences of *individual* utility with the reference of the *matter* of duty to the standard of *universal* utility. Otherwise the historical genesis of the moral faculty ought to be comparatively indifferent to her, on her general

principle that "the ancestry does not degrade the progeny." If man has sprung from the Ascidian, and yet is no less man, Duty may have sprung from Pleasure and Pain, and yet be no less Duty. Again, the issue between Utilitarianism and Intuitionism as a theory of Practice is only indirectly connected with any evolutional hypothesis : and a further distinction is necessary between an explanation of common-sense morality as it is and an exposition of morality as it ought to be. Because a utilitarian holds that the current rules of social behaviour have a general reference to the well-being of the community, he does not therefore regard them as the final *axiomata media* of scientific Utilitarianism. This distinction—for want of which both Locke and Mr. Spencer have been unfairly attacked—Miss Cobbe does not sufficiently bear in mind in criticizing Mr. Darwin's well-known suggestion of the hypothetical morality in an intellectualised bee-hive, where "unmarried females would think it a sacred duty to kill their brothers, and mothers would strive to kill their fertile daughters." It is on these habits that the well-being of the bee-community would seem at present to depend ; and we may grant that they would be represented as rules in the conscience of an average member of the hive. But a superior bee, we may feel sure, would aspire to a milder solution of the Population-question : and if we compare Mr. Darwin's hypothesis with the *actual* human conscience, we can find a tolerable parallel in the moral sense of an Eleazar or an Alva. And Miss Cobbe does not sufficiently put herself at the point of view of Utilitarianism to see that its principle admits of almost any degree of variation in actual rules without giving up the absoluteness of Duty.

In two essays on "Unconscious Cerebration" and "Dreams," Miss Cobbe, while giving an excellent popular exposition of Dr. Carpenter's theory, bases on it a peculiar argument for the non-dependence of soul on body. In dreams, as due to unconscious cerebration, the real, responsible Ego, the essence of which is Will, is not concerned : hence, argues Miss Cobbe, we find, as we should expect, that the sense of voluntary effort and the phenomena of moral emotion are curiously absent from our dream-life. The argument is ingenious : and if the facts on which it rests are ascertained by a wide induction, they are certainly striking. But Miss Cobbe seems scarcely to contend for their universality : my own experience affords opposite instances : and I should have thought that the consciousness of violent voluntary effort was incident to most nightmares, and that moral feeling was rather both present and absent incongruously (like other dream-phenomena) than absent altogether. Moreover, in the whole discussion, it is not sufficiently observed that the phenomena of dreams are not in themselves unconscious, though involuntarily originated : and that as conscious, they cannot be clearly thought as purely material changes.

The remaining essays show the same transparent liveliness of style, the same good sense, wide and ready sympathy, frank and vivacious optimism, as the other writings of the author. Miss Cobbe is an excellent populariser, and treats of the phenomena of religious history in a thoroughly intelligent and well-instructed manner, with much sobriety of judgment and occasionally penetrating suggestiveness. The tone of the essays is not so much scientific as docile to and receptive of science. Pure Theism appears here in a somewhat sectarian attitude, if we may apply the term "sectarian" to indicate a polemical purpose carried out with no bitterness or unfairness, but everywhere apparent : whether she points to the Oriental exaggeration of verbal inspiration, parallels Aryan with Semitic sacred literature, or notices the serpent and tree worship in Eden.

Perhaps the best thing in the book is a discussion of "Auricular Confession": unfortunately few of those to whom the question is one of practical importance are prepared to argue it merely on the basis of spiritual experience.

H. SIDGWICK.

Notes of Discoveries and Scientific Work.

Psychology.

Mr. Roden Noel contributes to the June number of *Contemporary Review* a remarkably vigorous and original, but at the same time singularly incoherent article on the Philosophy of Perception. The incoherence is partly due to plethora of matter : Mr. Noel attempts not merely to expound a somewhat complicated theory of his own, but to present it in relation to the views of Berkeley, Kant, Hamilton, Mill, Martineau, with incidental notices of Hegel and others : moreover, Mr. Noel does not confine himself to the Philosophy of Perception, but indulges in swift, abrupt digressions into cognate subjects, which break the continuity of his exposition. But there seems to be some deeper incoherence in his theory itself, due, we think, to a source fertile in confusion in later English philosophy, a Kantian element imperfectly harmonized with indigenous notions. Mr. Noel holds that we have intuitive and certain knowledge of the non-ego, as that which resists our effort : that reflection shows us percipient of this non-ego as having primary and secondary qualities, and that the supposed scientific grounds for rejecting this affirmation are not really valid. But to the question whether these qualities exist, as perceived, out of perception he offers two different answers, between which he seems to hesitate. The first is that secondary qualities, and to some extent primary, are "created in perception comparatively dark external qualities being brought into relation with corresponding internal capacities, the vari-coloured flame of consciousness springs between." Whatever may be said for this theory, it certainly does not "satisfy common sense": accordingly, Mr. Noel offers for more complete satisfaction his second answer. Colour, as we perceive it, may be a property of the luminiferous ether : the different undulations may actually be coloured red, blue, &c. : and similarly in the case of sound, though it is less clear that we naturally conceive resonance (as distinct from vibration) to exist in things when perceived. Here again the divergence from common sense is greater than Mr. Noel seems to see : a rose, causing red undulations in the space between it and our eyes, is not the red rose that we naturally believe in. A deeper difficulty emerges when Mr. Noel adds suddenly that "the whole external thing and its qualities is phenomenal as well as noumenal. It is in time and space." But if what is in space is phenomenal, primary qualities are only known to us as they appear, i.e. other than they are apart from our apprehension : and we seem landed in the first theory again. Part of the article is taken up with a subtle and closely reasoned polemic against Theism—or rather against Divine Creation as an explanation of the origin of the universe.

Geography.

Lake Tanganyika.—The welcome telegram from Zanzibar which confirms Dr. Livingstone's safety also decides the long vexed question of whether Lake Tanganyika belongs to the Nile basin in the negative, and apparently leaves no other possible outlet for the fresh waters of this great lake than the unvisited Lufiji river, which reaches the east coast in Lat. 8° S. It does not, however, contain any opinion as to the ultimate outflow of the Chambezé lake-chain, and this may be to westward.

New Guinea.—A very interesting *résumé* of the efforts now being made to explore this the least known, though perhaps the largest, of the East India Islands, its area being more than double that of the British Isles, is given in *Petermann's Mittheilungen*. The causes which have now made this equatorial island a centre of attraction appear to be as varied as the nationalities among which interest has been excited. A Russian expedition, having the scientific exploration of New Guinea for its chief object, left St. Petersburg in October 1870 (see *Academy*, vol. ii. p. 442), and, passing through the Straits of Magellan by Tahiti and the Samoan Archipelago, rested at Astrolabe Bay, a deep inlet of Papua, in September 1871. Letters received from the leader of the expedition, N. v. Maklai, state that he contemplated remaining at this station for a few months to study the habits and language of the natives before attempting to penetrate into the interior. The Papuans of this coast are exceedingly savage, have no knowledge whatever of the use of iron, and few had ever seen Europeans. An expedition from Italy, under Odardo Beccari, a botanist known through his travels in Borneo and the Bogos country, and de Albertis, is also believed to be at present in the neighbourhood of New Guinea. Commercial relations have recently sprung up between the islands of Torres Strait and the south coast of New Guinea, and these trade channels may afford useful

openings for exploration. Last year the London Missionary Society founded a number of stations on the south-eastern peninsula, under charge of educated natives of the Tonga Archipelago; the missionaries Murray and Macfarlane, under whose superintendence these stations were established, describe the splendid tropical scenery of Redscar Bay, closed inland by the massive heights of Stanley Mountains, rising 13,000 feet. At this place an earthen jar was presented by the natives to one of the missionaries, and the gold dust used in its composition giving evidence of the presence of the precious metal in this neighbourhood, a vessel carrying sixty gold-diggers was fitted out at Sydney in January 1872 to explore the coast; it suffered shipwreck on the reefs during the passage. A movement favouring a German colonization of New Guinea having been propagated in Australia, the Dutch have been awakened to a sense of their property in the island, and a vessel has left Batavia to take formal possession of that district which does not fall within the nominal limit of their territories in the East Indies.

The Russian Geographical Societies.—The explorations recently carried on under the auspices of the Imperial Geographical Society of Russia and its branches at Irkutsk, Tashkend, Orenburg, and Tiflis, along the whole vast line of Asiatic and European frontier, forms the subject of an essay by Herr Spörer in the above mentioned journal. In the farthest corner of Asiatic Russia, the expedition of 1870 to the land of the Tchukchees has led to the publication of a new general map of North-eastern Siberia, while the meteorological station founded at Verkhioiansk has already added to our knowledge of the climate of the far north. The important journey of the Archimandrite Palladius in the Amur-Ussuri region and Manchuria has already been noticed in the *Proceedings of the Royal Geographical Society*; the map of his companion, the topographer Nachwalnych, is a most valuable addition to Asiatic geography. Of not less import was Prschewalski's expedition to the land of the Ordos tribes and the Koko Nor, though the results of his travels have not yet been made public. In Western Mongolia official journeys have been made to Khobdo and Uliassutai; then we have Fedchenko's exploration through Kokand to the borders of Eastern Turkestan; and the labours of M. Struve, who has determined the accurate chartography and longitudes of many points in Western Turkestan. Kuldsha has been taken possession of by Russia, and this is the starting-point for an examination of the range of the Thian Shan. Along the East Caspian coast the garrisoned positions of Krasnovodsk, Michaelovsk, and Mulla-Kari, appear to be a failure from a commercial and strategic point of view, as they are rendered almost uninhabitable from their barren and waterless condition, and are separated by the desert from the trade of Khiva. The meteorological stations founded at Krasnovodsk and Fort Alexandrovsk, on the peninsula of Mangischlak, on the other hand, are a real gain to science. A railway connecting the Black Sea with the Caspian through Tiflis, as is proposed, would greatly facilitate commerce with Persia. The frontier country of Trans-Caucasia is being examined by the experienced explorers Radde and Sivers, and very interesting results respecting the vertical distribution of vegetation are being collected.

The Movement of Depression of the Andes.—The number of *Ausland* for May 13 gives a list of the altitudes of some of the more important points in the Andes, determined at distinct intervals of time. The heights were found to have diminished on each occasion that they were measured. Quito was found by La Condamine in 1745 to be 9596 feet above the sea; by Humboldt in 1803, 9570 feet; by Boussingault in 1831, 9567 feet; by Orton in 1867, 9520 feet; and by Reiss and Stübel in 1870, 9350 feet. Quito has sunk 246 feet in 125 years, and Pichincha 218 feet in the same period. Its crater has sunk 425 feet during the last twenty-six years, and Antisana 165 feet in sixty-four years. Numbers are given in each case tracing their gradual descent.

A paper on recent geographical work in the United States appears in the *American Journal of Science* for May. During the past years the triangulation of Lakes Superior, Michigan, St. Clair, and Champlain, has been in progress, while other surveys are being carried on by Wheeler, in Nevada and Arizona, of the territory south of the Central Pacific Railway; by Raymond of the River Yukon in Alaska, as well as that of the Fortieth Parallel by Professor King. Many surveys and reconnoisseances have been made by the Engineer Corps, or are in progress, of the Western River; among them one of the vicinity of Vicksburg, "the key of the Mississippi valley," was undertaken through a too well founded apprehension that the river will seek a new channel at that point and leave Vicksburg an inland town. The reconnaissance of a second railway route across the continent by way of the Upper Missouri and the Columbia Valley has added greatly to the knowledge of that country.

An important original paper, illustrated with a map, describing the mountainous country which forms a continuation of the highland of Abyssinia to the northward, and its inhabitants, now under Egyptian rule, has been published by "Pasha" Munzinger, the well-known explorer, in *Petermann's Mittheilungen*. An account of this journey by Dr. Beke was given in the *Athenaeum*.

The *Zeitschrift der Gesellschaft für Erdkunde zu Berlin*, No. 36, contains a synopsis, extending over more than seventy pages, of books, essays, maps, and plans, that have appeared, either separately or in journals, between December 1870 and the end of November 1871, on matters relating to geography. It is prepared by Dr. Koner, the editor of the *Zeitschrift*, and is very useful for reference.

Zoology.

On a Malformation of the Palate in Young Lions.—In a paper "On Hereditary Transmission of Structural Peculiarities" (*British and Foreign Med.-Chir. Review*, April) Dr. Ogle has collected a number of more or less well-authenticated cases referring to this subject. The observations made on the breeding of lion-cubs in our Zoological Gardens are of some practical interest. The author has been informed by Mr. Bartlett, the superintendent of the gardens in Regent's Park, that he had seen about fifty lion-cubs born in that menagerie, and that more than 90 per cent. had cleft palates. They are unable to suck the mother, and soon perish. On the other hand, in the Dublin Zoological Gardens not less than eighty-six lion-cubs have been successfully reared, this number representing rather more than nine-tenths of those born. Professor Haughton considers that this difference is not attributable to climate, but is due to the different method of feeding the parents; while in London the lions are fed on beef and horse-flesh, with bones which they may gnaw, but of which they are unable to eat any portion, Professor Haughton feeds the lionesses in Dublin twice a week on goat's meat. They devour the entire animal, bones and all, thus acquiring the requisite amount of bone phosphates for the perfect development of the cubs. Any other small animal will answer as well as the goat. Before this plan was adopted in the Dublin gardens, the cubs born there perished from the same malformation of the palate as in London. Professor Haughton's experience is in perfect accordance with another fact, viz. that birds of prey which are taken when very young from the nest, and fed exclusively on meat without bone, never acquire sufficient strength of bone to be able to fly or even to stand. Although they grow to nearly the normal size, their skeleton lacks the earthy matter, and remains so soft that the bones are easily bent or broken.

The Zoological Society of London have just issued the third part of their *Proceedings* for the year 1871, and the concluding portion of the seventh volume of their *Transactions*. There can be no question that these publications are unrivalled in periodical zoological literature, in respect of variety and quantity of contents and beauty of illustration, and are not surpassed by any other similar work as regards the importance of some of the memoirs. And it is one of the greatest boons to the working zoologist that the flourishing state of the finances of the society allows these valuable publications to be delivered to the fellows and members for the low price of a guinea. We could not give here in any detail a list of the contents of this volume of the *Proceedings*. It consists of 823 pages, and is illustrated with 76 plates (most of them coloured), and a large number of woodcuts. Among the 154 communications we find some 20 noteworthy papers on Mammals, 47 on Birds, 10 on Reptiles, 7 on Fishes, 16 on Mollusks, one on Crustaceans, one on Arachnids, 7 on Insects, and 8 on the remaining lower animals.—The seventh volume of the *Transactions* contains 609 pages, and is illustrated with 73 plates, the following being the most recently published memoirs:—7. P. L. Sclater, "On Certain Species of Deer now or lately living in the Society's Menagerie" (pp. 333–352). 8 and 9. R. Owen, "On *Dinornis*," parts xv. and xvi. (pp. 353–396). 10. W. Peters, "Contributions to the Knowledge of *Pectinator*, a Genus of Rodent Mammalia from North-Eastern Africa." II. J. Murie, "Researches upon the Anatomy of *Pinnipedia*; part i. On the Walrus" (pp. 411–464). 12. J. Murie, "On the Dermal and Visceral Structures of the Kagu, Sun-bittern, and Boatbill" (pp. 465–492). 13. R. O. Cunningham, "On some Points in the Anatomy of the Steamer-duck (*Micropterus cinereus*)" (pp. 493–502). 14. J. Murie, "On the Female Generative Organs, Viscera, and Fleshy Parts of *Hyaena brunnea*" (pp. 503–512). 15. R. Owen, "On the Dodo; part ii. Notes on the Articulated Skeleton of the Dodo (*Didus ineptus*) in the British Museum" (pp. 513–526). 16. J. Murie, "Researches upon the Anatomy of the *Pinnipedia*; part ii. Descriptive Anatomy of the Sea-lion (*Otaria jubata*)" (pp. 527–596).

Annali del Museo civico di Storia naturale di Genova.—The second volume of this periodical has just been issued; it is published under the auspices of the Marquis J. Doria, to whom his native city is indebted for the foundation of a museum of natural history, which appears to be developing into one of the most important scientific institutions in Italy. The present volume contains the following papers:—1. G. Canestrini, "On Italian *Opilionidae*" (pp. 5–48). 2. P. M. Ferrari, "The *Aphidiidae* of Liguria" (pp. 49–85). 3. S. Trinchese, "A New Genus of the Family of *Aeolidae* (*Ercolania*, from the Mediterranean)" (pp. 86–132). 4. G. Mayr, "Formicidae boreenses" (pp. 133–155). This volume is illustrated with thirteen beautiful plates, part of which are coloured.

Faune des Vertébrés de la Suisse, par Victor Fatio. Vol. III. : *Histoire naturelle des Reptiles et des Batraciens*. Genève et Bâle. With 5 plates.—The first volume of this work, containing the mammals, appeared in 1869 ; the second, which will contain the birds, is in the course of preparation. Although the subject of this volume is partly the same as that of Leydig's *Saurians*, which was noticed in the *Academy*, No. 44 (vol. iii. p. 112), it is treated in a very different manner, the author's original observations being directed more to the habits and external characters of the various species than to their internal structure. The work will be found of great service to the local naturalist, but for the general student it contains too much matter regarding questions of classification, derived from standard works on herpetology. It is, however, of interest to know Dr. Fatio's reasons which induce him to distinguish two kinds of tessellated snakes (*Tropidonotus viperinus* and *T. tessellatus*), and two of brown frogs (*Rana temporaria* and *Rana agilis*).

Chemistry.

The Greenland Meteoric Iron.—Not many metres from the spot on the shore at Ovifak where he found the large iron masses that were described in the *Academy*, Feb. 1 (vol. iii. p. 54), Nordenskjöld observed a rock, different in appearance and composition from the basalt of the cliffs, and enclosing iron not only in granules and spherular masses, but as a vein of the metal several inches wide, and several feet in length. An examination of the iron of this vein forms the subject of a paper by Wöhler in the *Nachrichten der König. Gesell. der Wiss. zu Göttingen*, No. 15 (15th May, 1872). The metal has the appearance of grey cast iron, has a bright metallic lustre, is very hard and quite unalterable in air, and has a specific gravity of 5.82. Nordenskjöld noticed that the metal of the larger masses, when heated, gave off a large quantity of gas ; Wöhler finds that this iron evolves more than 100 times its volume of a gas which burns with a pale blue flame, and is carbonic oxide mixed with a little carbonic acid. It follows from this, writes Wöhler, that the iron contains a considerable quantity of carbon and a compound of oxygen, and that the metallic mass itself can at no time have been exposed to a high temperature. The iron by this treatment becomes much brighter than before, and is much more readily soluble in acid ; but it still leaves a carbonaceous residue. A fragment heated in a current of hydrogen lost 11.09 per cent. of its weight : in other words, it contained that percentage of oxygen. Hydrochloric acid acts but slowly and partially on this metal, evolving first sulphuretted hydrogen, then hydrogen having the odour of a carburetted hydrogen, and deposits a black granular magnetic powder, which, though insoluble in cold acid, generates on the application of heat a gas with a strong odour of a hydrocarbon, and leaves a residue of amorphous sooty carbon and slightly lustrous graphitic particles. By treatment with iron perchloride, the metal dissolved without any evolution of gas, leaving a black residue of about 30 per cent., which, after having been dried at 200°, lost by subsequent ignition in hydrogen 19 per cent. of its weight, water being formed. It is now very readily attacked by hydrochloric acid, evolving sulphuretted hydrogen, and leaving a residue of nearly pure carbon, partly in powder, partly in graphitic scales. Iron and hydrogen chlorides therefore appear to dissolve the free metal only, and to have no effect on that in combination with oxygen and sulphur. The iron has the following ultimate percentage composition :—

Iron	80.64
Nickel	1.19
Cobalt	0.49
Phosphorus	0.15
Sulphur	2.82
Carbon	3.69
Oxygen	11.09
<hr/>	
	100.05

As regards the question of the condition in which this large amount of oxygen is present in an apparently metallic mass, Wöhler is at present unable to arrive at a conclusion. From its homogeneous character and crystalline structure, it might be assumed to constitute a compound with iron as yet unknown, a diferrous oxide, Fe_2O , were it not that this view leaves no iron for combination with the sulphur and carbon. As, however, Nordenskjöld has found octahedra of magnetite in another Ovifak iron, Wöhler is disposed to regard the mass as a very intimate mixture of magnetite, of which there would be 40.2 per cent., with metallic iron, its sulphide, carbide, and phosphide, its alloys of nickel and cobalt, as well as some pure carbon in isolated particles. The latter undergoes no change when the magnetite and carbide by the action of heat generate carbonic oxide.

Chinamine, a New Alkaloid in Cinchona succirubra.—Hesse, during an examination of cinchona bark from the Indian plantations, found a new body, to which he has given the name of chinamine (*Ber. Deut. Chem. Gesell. Berlin*, 1872, No. 6, 265). It is soluble in alcohol provided it be not dilute, and is rather readily taken up by ether, separating from its solutions in long white anhydrous prisms, resembling asbestos in appearance. The neutral sulphate crystallizes with difficulty in six-sided plates and short prisms. With chloride of gold, the solution of its hydrochlorate gives a yellow amorphous precipitate, which soon

becomes purple and deposits gold, the supernatent solution becoming purple, and afterwards brownish-red. Dilute solutions in acid exhibit no fluorescence whatever, nor does chinamine strike a green colour with chlorine and ammonia. It is barely bitter, but its solutions in acids have a rather bitter taste. It melts at 172° C., and unless kept for some minutes in a state of fusion crystallizes on cooling. The author hopes shortly to ascertain its elementary constitution.

Amblygonite.—Under the name of "Montebrasite," Moissenet and Des Cloizeaux last year described a new mineral species, occurring at Montebras, Creuse, and bearing in its physical characters a great resemblance to the amblygonite of Arnsdorf, near Penig, that Rammelsberg analysed in 1845. The mineral in each case is a fluophosphate of aluminium, lithium, and sodium, the French containing less than half the phosphoric acid and more than three times the fluorine of the German specimen. So great a disparity in composition being difficult to reconcile with Des Cloizeaux's observations of the perfect accordance, as regards crystalline form, cleavage, specific gravity, lustre, and hardness, of "montebrasite" with Rammelsberg's amblygonite, a further examination of the French mineral seemed desirable. This has been made by von Kobell, whose paper, read before the Bavarian Academy, is to be found in the *Jour. prakt. Chem.* 1872, Nos. 3 and 4, 112. His analysis of the Montebras mineral gave results that differed but slightly from those originally obtained by Rammelsberg with amblygonite. Within a few days of the publication of von Kobell's memoir at Munich, Rammelsberg read a paper in Berlin (*Ber. Deut. Chem. Gesell. Berlin*, 1872, No. 3, 78) on the same subject. His results correspond with those of von Kobell in all important respects, with the single and comparatively trifling exception that Rammelsberg finds the alkaline metal of the French specimen to be almost exclusively lithium. Von Kobell and Rammelsberg have consequently shown the mineral of Montebras to be amblygonite, and not a new mineral species. Although Des Cloizeaux noticed a difference in the mineral for the two localities as regards the dispersion of the optic axes, von Kobell contends that this feature alone, which has also been observed in mica and topaz, will not warrant us in regarding them as distinct minerals. Amblygonite, hitherto a rarity, occurs at Montebras in compact masses associated with wavellite and calcite in a bed of tin ore. Rammelsberg, since analysing the mineral a second time, believes its composition to be represented by the formula $3(Li, Na)Fl + 2AlP_2O_5$. At a recent meeting of the Chemical Society of Paris (*Revue scientifique*, 27th April, 1872, 1049) it was stated by Pisani that some weeks before the publication of the papers of von Kobell and Rammelsberg he, in a note in the *Comptes rendus*, established the identity of the "montebrasite" of Moissenet with amblygonite.

Diodhydrin.—This substance, the existence of which has hitherto been doubted, has been prepared by Nahmacher (*Ber. Deut. Chem. Gesell. Berlin*, No. 8, 13th May, 1872) by heating dichlorhydrin with potassium iodide in excess for from twelve to fourteen hours in closed tubes in a salt bath. The dark-coloured product is freed from the iodine which, gives it this hue by shaking it with mercury or, what is still better, weak sulphuretted hydrogen water. It is a pale yellow oily body, having a specific gravity of 2.4, and forming at from -16° to -20° a white crystalline mass. Analysis gave numbers corresponding with the formula $C_4H_6I_2O$. It cannot be distilled without decomposition ; a strong odour of acrolein is observed, and water, allylic alcohol, and allylic iodide pass over. The author also communicates the results of his investigation of the action of ammonia on dichlorhydrin and diiodhydrin.

Sellaite.—Strüver has recently published a paper, in the *Atti della R. Accad. di Torino*, on a colourless transparent mineral occurring with anhydrite at Geibroula, in Piedmont, and crystallizing in the quadratic system. Small fragments of this mineral melt in the flame of a candle ; it is insoluble in water and acids, with the exception of sulphuric acid, which causes the evolution of hydrogen fluoride. The sulphuric acid solution contained 39.64 per cent. of magnesia, and the chemical and physical characters of this mineral led Strüver to consider it a magnesium fluoride analogous to fluor-spar in composition.

Concentrated Ozone.—By varying the form and construction of his ozone tubes, A. Houzeau (*Comptes rendus*, 74, 256) has devised an ozoniseur which, with a Ruhmkorff giving a spark from 2 to 3 centim. in length, yields ozone of a highly concentrated kind. He has no difficulty in producing oxygen containing from 60 to 120 milligrammes of ozone to the litre, according as the temperature is 15° or -30°, and he has since constructed an apparatus yielding 188 milligrammes of ozone to the litre.

New Publications.

- BERNARD, C. *De la Physiologie générale*. Paris : Hachette.
 BRAUNE, W. *Topographisch-anatomischer Atlas nach Durchschnitten an gefrorenen Cadavern*. Leipzig : Veit.
 EEDEN, A. C. VAN. *Flora of Harleem*. No. I. Haarlem : Loosjes.
 GLADSTONE, J. H. *Michael Faraday*. Macmillan.
 GROTE, G. Aristotle. Murray.
 MAHAFFY, J. P. *Kant's Critical Philosophy for English Readers*. Vol. III. (*Kant's Prolegomena*). Longmans. Digitized by Google

- PACKARD, A. S. Development of *Limulus Polyphemus*. Trübner.
 PAULICKI, A. Beiträge zur vergleichenden pathologischen Anatomie. Berlin : Hirschwald.
 QUENSTEDT, M. Die neuen deutschen Münzen. Berlin : Springer.
 REPORT of United States Geological Exploration of the Fortieth Parallel. Vol. V. : Botany. By S. Watson and D. C. Eaton. Washington : Office of Engineers.
 SCHWARZ, A. Der jüdische Kalender historisch und astronomisch untersucht. Breslau : Schletter.
 SPICKER, Gideon. Die Philosophie der Grafen von Shaftesbury, nebst Einleitung u. Kritik über das Verhältniss der Religion zur Philosophie und der Philosophie zur Wissenschaft. Freiburg i. B. : Troemer.
 THORELL, T. Remarks on Synonyms of European Spiders. No. III. Upsala : Lundström.
 THUEMEN, F. DE. Fungi Austriaci Exsiccati. Centuria II. III. Berlin : Calvary.
 TYNDALL, J. Researches in Molecular Physics by means of Radiant Heat. Longmans.

History.

Von Helfert's History of Austria. [*Geschichte Oesterreichs vom Ausgang des Wiener October-Aufstandes, 1848*. Von Joseph Alexander Freiherrn von Helfert. III. : Die Thronbesteigung des Kaisers Franz Joseph I.] Frag : Tempsky.

In the preface to this (the third) volume of his *History of Austria*, Baron Helfert acknowledges that he has not given it to the world without a certain feeling of anxiety. Twenty-two years is a long period, but still it is not long enough to secure that perfect "objectivity" which, more than any other quality, is required of the historian. This is especially the case in Austria, where of the questions raised in 1848 so many still await their final answer. Some might add that our author, the son of a high-placed official before 1848, and himself under-secretary in the ministry of education when Count Leo Thun was minister, has been too much involved in political controversies for his impartiality to be considered above suspicion. And at the outset of this notice it may be observed that the work is to a certain extent that of an advocate. It is true that the author professes, and has doubtless endeavoured, to place himself in a position above considerations of party. But his own views, and those of the class with which he is connected, necessarily tinge the most conscientiously written narrative. The peculiar sources of information to which he has had access have contributed to this result. The Windischgrätz family placed at his disposal the papers left by the late Prince Alfred, the "Poliorcetes" of 1848. Like the Duke of Wellington, whom he resembled in a certain narrow-minded conservative conscientiousness, the prince seems to have kept copies of all papers of any importance that passed through his hands. His brother-in-law, Felix Schwarzenberg, on the other hand, left not a memorandum behind him; but the omission has been to some extent supplied by correspondence preserved by a member of that house, of one who was intimately associated with both the princes at the time when the ministry Schwarzenberg-Stadion was constituted. Besides these two important sources, Baron Helfert has received a number of private communications from actors or spectators in the drama which he relates. As several of his informants especially desired that their anonymity should be preserved, our author, not allowed to name all, does not name any of them, merely indicating the source and character of each contribution by such notices as "Privat-(Diplomatie)," "Privat-(Staatskanzlei)," and the like. It is amusing to observe how many of those contributed by members of the Austrian aristocracy are written in French. None of these private communications are derived from "liberal" sources either German or Hungarian, a fact in itself sufficiently significant.

With regard to the central event which has given its title to the volume, the abdication of Ferdinand and the accession of Francis Joseph, the author draws on his own experience, having been himself one of the chosen few admitted to witness the scene in the archbishop's palace at Olmütz. Naturally he dwells at great length on that event, its causes and consequences, and in so doing displays very conspicuously the peculiar artifice of his history—a certain trick of literary perspective whereby trifles in which the writer takes an interest are made to obscure events more important, but withal less agreeable to relate. For instance, the most important question with respect to the abdication of Ferdinand was its relation to the Hungarian constitution. But this question is dismissed by a statement that after Schwarzenberg had heard the opinion of Baron Jósika, formerly *Hofkanzler* for Transylvania, the only Hungarian statesman consulted on the point, the latter lost all credit in the eyes of the all-powerful minister-president. What opinion a transcendental cynic like Prince Felix had of a fellow aristocrat is a matter worth knowing; whether the Hungarian constitution was violated or not appears to a courtier and a bureaucrat to be too trifling to be discussed. In fact the parts relating to Hungarian affairs form perhaps the weakest portion of the book. Throughout the three volumes they are discussed in a narrow *incidental* way, which not only does not give the reader a broad general view of the controversy, but does not even afford him materials from which he might form a view of his own. The form in which the history is written, its slavish and inartistic adherence to chronological order, the way in which the author tries to fasten his reader's attention down to the details of revolutionary excesses and follies put before him, while he is as much as possible prevented from looking before and after, from contemplating the wretched obscurantism that existed until 1848, or the absolutist severity that prevailed as soon as the revolution had been crushed—all these literary devices not only throw suspicion on the "objectivity" claimed by the author in his preface, but they diminish the value of his work as a history. One of his principles—that of leaving out of consideration the future development and conduct of his *dramatis personae*—is avowed in the preface to his third volume, and explained as dictated by a feeling of delicacy towards living individuals. As a last peculiarity of method which diminishes the completeness of his history and consequently renders it often obscure is his theory, laid down in the preface to his second volume, that modern Austria begins not with the revolution of March 1848, but with the establishment of the ministry of Schwarzenberg-Stadion at the end of that year. This theory, apparently suggested by his dislike of the revolution, will commend itself to most minds as arbitrary and sophistical. It certainly has the effect of disturbing the natural order of his story, rendering a large part of the second volume an awkward introduction to the first.

The histories of the present day have been divided into historical romances and historical essays. Following this principle of classification, the book before us must be placed in the first division. When the author writes as a philosophical historian, he is generally vague and indefinite. This circumstance makes his second volume, in which he gives a general view of Europe in 1848, decidedly inferior to the first, wholly taken up as it is with the siege of Vienna by Prince Alfred Windischgrätz, and also to the third now before us. As a descriptive historian he has great merits, notably in his account of the bombardment of Vienna and of the desperate struggle in the Jägerzeil, as recounted in the first volume. He continually enlivens the narrative with details at once brilliant

and characteristic of the people he is describing. Who will not recognise the Austrian officers who complained, when the etiquette of the service required their attendance at the head-quarters of Windischgrätz, that there a stiffness prevailed "wie beim Maharadscha der drei Arabien?" He exhibits other qualities of an historical novelist in his full-length portraits of Prince Alfred Windischgrätz, Prince Felix Schwarzenberg, and Count Francis Stadion. We may decline to accept unreservedly his estimate of their characters and abilities, but at any rate he enables us to understand what manner of men these saviours of society were, at any rate as they appeared to intimate and friendly observers. And this in fact is the point of view from which the book may fairly be judged. It is an able, and—if we except a few occasional bursts of loyal invective—a moderate apology for the party which triumphed in 1849 and has since suffered so many reverses, stated by one whose experience and connections especially qualified him as its apologist. As such it will serve to guide and assist some future historian when the present heat of political controversy in Austria has subsided, but can hardly fulfil the fond expectations professed by the author, and be received by the world as the final impartial verdict of history. The time for judging the events of 1848–9 without anger or affection has, it would seem, not yet arrived.

ARTHUR J. PATTERSON.

THE HANSEATIC HISTORICAL SOCIETY.

IN Whitsun-week 1871, a new historical society was founded at Lübeck, for the purpose of combining once more all those cities which, in former ages, had been members of the German Hansa. According to a resolution passed at the time, invitations to join this purely literary resurrection of the famous old league were sent to no less than ninety-two towns, maritime and inland, and including those which long since have been separated from the body politic of Germany—the cities of Livonia and Esthonia, as well as of Holland. At the annual meeting which took place at Lübeck on the 21st and 22nd of May last, a very interesting report was brought up by the council. It states that thirty-eight of the cities have not only answered in the affirmative, but are willing to contribute, according to their means, an annual share to support the publications of the society. Considerable sums indeed will be forthcoming from Hamburg, Bremen, and Lübeck, from Cologne and Berlin, and from the principal towns of the Baltic and of Westphalia. Amsterdam, Harderwijk, Venloo, Deventer, Campen, Arnhem, and even diminutive Bolsward and Zutphen, have joined the new fraternity with sums in proportion to their respective importance. Eleven other places have expressed their thanks, and added their regret that they were not able to join in the same way; whilst the remaining forty-two have, up to this time, not thought it worth while to answer at all. Besides this civic-membership, there is another individual one, which, since last year's meeting, has risen from ninety to about 120, a gathering of friends and students of mediaeval history, government and city officials, keepers of record offices, professors of universities and high-schools, merchants, lawyers, artists, &c. An annual payment of two thalers will secure to each member a copy of the journal, the first annual number of which is to contain this year's report, and several important contributions to the history and the laws of the Hansa Confederation. During the meeting itself, a circumstantial account was communicated respecting the two chief works which have been taken in hand by the society. The first is to be an edition of the so-called *Recesses*, i.e. the transactions of the old Hanseatic parliaments, beginning with 1431, as the earlier ones down to that year are already in course of publication under the direction of the Munich Historical Commission.* The editor of this first series will likewise superintend the new one, the chief labour being entrusted to two young scholars, natives of Livonia, and pupils of Professor Waitz, of Göttingen, Drs. Höhlbaum and von der Ropp. The most important materials for this col-

lection are extant in the archives of Prussia proper and the German provinces of Russia. The second work, which also will soon be begun, is a collection of such documents, charters, despatches, and letters, as have a more general bearing upon the history and administration of the Hanseatic League, and which for this reason cannot be printed in the more local collections issued by the special historical societies of Lübeck, Hamburg, Bremen, Brunswick, Stralsund, Cologne, &c. A third undertaking was unanimously adopted by the late gathering, viz. an edition of the oldest version or versions of the ancient Lübeck code of laws, to which public attention has been directed by an excellent paper of Professor Frensdorff, of Göttingen. Dr. Wehrmann, the principal archivist at Lübeck, then communicated to the society his researches on the origin of the ancient patrician families of that city, and their relations with and difference from the families of the nobility and gentry. Professor Mantels followed with a description of the ways and means by which the old Lübeck traders fetched relics of the saints from England (Canterbury) and from Venice, and Professor Pauli, of Göttingen, discussed the early use and the value of the word "Hansa" in English documents of the twelfth and thirteenth centuries. A visit was also made to the old archives, still kept in a lofty chapel of St. Mary's Church, called the "Threse" (Thesauraria), and the magnificent charters granted by the kings of England to the Hansa merchants, beginning with Henry III., besides many other documents referring to the Steelyard in London, were displayed and commented upon from various sides. It is not unlikely that our own Public Record Office and the Guildhall Records will soon be visited again by some collaborators of the new society, as the early share which the government and the commerce of England took in the propagation of the Hansa has not yet been adequately elucidated. A proper selection for publication amongst the great masses of documents bearing on the subject can never be made without repeated researches in the stores of such incomparable collections. The next annual gathering of the Hanseatic Historical Society will be held at Brunswick, in Whitsun-week 1873.

Contents of the Journals and Intelligence.

Ephemeris Epigraphica, part ii. (Berlin and Rome).—Wilmanns shows that the *praefectus castrorum* was the emperor's official, and served to keep in check the senatorial *legati* in command of the legions. Later, when every legion had its own camp, he became also the commander of the legions, the emperor's power having now annihilated that of the other orders in the state.—Bormann treats *de Adiſiōrum Urbis Titulis*; and Mommsen continues his *Observationes Epigraphicae*, noting especially the erasure of the names of Diocletian and his colleagues, which was probably done by Constantine's orders.—Dittenberger gives some Attic inscriptions bearing on Roman history.

Revue des deux Mondes, May 15.—Coulanges describes "the German invasion in the fifth century," pointing out that its chiefs were really in the service of the empire, and that it was not, in the full sense of the term, a conquest. Of course the whole tone is sharpened by recent events.

Bullettino dell' Instituto, April.—Gives an inscription of L. Coiedius, who served in Claudius' expedition to Britain with the eighth legion; and one referring to a German king, Aistomodius (?= "battle-mood"), found at Carnuntum, near Vienna.—The account of the excavations at Certosa is continued; and an inscription given containing names of Athenian prytaneis of A.D. 126–127, which shows that the old Council of 500 had been restored (it had been 600), or rather that it had been made 507, i.e. thirty-nine prytaneis for each of the thirteen tribes which then existed.—Some inscriptions on sling bullets follow.

Gött. gel. Anzeigen, March 13.—Contains a good critique of the present science of statistics. It is shown that the mere figures prove nothing unless the whole inner life of each state is taken into account, which alone can explain and account for its various manifestations.—

March 20.—Praises the new *Dictionary of the Low German Dialects* (middle period), by Schiller and Lübben, which is of much interest for English etymology also.—The article on the Νεοελληνικά Ἀνδλεκτα discusses the question of rhyme in the Romæc ballads, and especially refers to the article in our thirty-fifth number (vol. ii. p. 508). A notice of Buchner's *Aus den Papieren der Weidmann'schen Buchhandlung* points out how an account of this great publishing house throws light on the history of German literature at the end of the last century—much as a history of our own great publishing firms would do on English literary life. Buchner gives many letters.—March 27.—Goedeke adds some fresh information to that contained in Ranke's *Die deutschen*

* See *Academy*, No. 27 (vol. ii. p. 339).

Mächte und der Fürstenbund.—April 3.—Brandes analyses the *Ideale und Irrthümer* of Karl Hase (the well-known church historian), who was one of the students who kept alive the idea of German unity in the evil times after the Congress of Vienna, when the kings broke their promise of giving free institutions to the people which had shown such devotion in the War of Liberation against Napoleon. Hase was one of those who suffered imprisonment.—Pitré's *Le Lettre, le Scienze e le Arti in Sicilia negli anni 1870-1* shows the wonderful revival of literature in the South since Garibaldi once more called Sicily to life.—April 10.—Notices Lübf's essay on the Christian missionaries in Switzerland before St. Gall, especially St. Beatus, perhaps also of Celtic origin.—April 17.—A notice of Goltz's *Die ländliche Arbeiterfrage und ihre Lösung* is specially interesting just now. The solution of the difficulty depends, in the reviewer's belief, on our giving a greater security to the labourer's position, a permanent home leading to a higher standard in morality, education of children, &c.—Hübner's *Sixte Quinte* is reviewed and stress laid on Sixte's views as being those of the Franciscan section of the church as opposed to the Dominican and Jesuit views and to Philip II.'s schemes.—May 8.—Reviews Rossbach's *Römische Hochzeits- und Ehedenkmalen*, and Koehne's *Tempel d. capitolin. Jupiter*; the last to explain the difficulties connected with the architecture.—Waitz discusses the original authorities for the story of the Maid of Orleans; and Liebrecht's life of Il Conte di Prades as illustrating the constitutional history of Sicily.—May 15.—Analyses Eschenloer's *History of Breslau*, one of the contemporary narratives which the Society of Silesia is publishing, and which illustrate the Hussite movements and the commencement of the Thirty Years' War.—An analysis follows of Könneke's narrative of his suspension by the Bishop of Paderborn; a good illustration of the absolute power of the bishops.—The conclusion, too, of Rogière's *Recueil général des Formules usitées dans l'Empire des Francs du VIII^e au XI^e Siècle* is criticized by Waitz.

Revue des Questions Historiques (Rom. Cath.), April.—Has an article illustrating the constitution of Gaul under the Romans (50 to 27 B.C.), from lately discovered coins and inscriptions; and another on the death of Henri IV.'s mistress Gabrielle d'Estrees, as described in a contemporary letter; stress is also laid on the way in which Sully interpolated, or in fact re-wrote, some of the letters inserted in his narrative.—A document on the seizure of Boniface VIII. at Anagni (from the British Museum) follows, and Masson reviews the third volume of Haddan and Stubbs' *Councils and Ecclesiastical Documents relating to Great Britain and Ireland*.

Von Sybel's *Historische Zeitschrift*, 1872, part ii.—An article on St. John of Nepomuck (whom Wenceslaw threw into the Moldau at Prague—because of his relations with the queen as her confessor, according to the popular story) traces the historical origin and growth of the legend.—A very full account follows of the negotiations of Kaunitz with France and Russia which brought about the Seven Years' War.—An article on the "German Territory towards the End of the Eleventh Century" shows the nature of the German kingly power in early times, before it became associated with fixed territorial possessions, and so a source of dissension, whereas originally it had been the means of unity.

Dr. Potthast, the Custos of the Berlin Library, and author of the *Bibliotheca Historica Medii Aevi*, will shortly publish the *Regesta Pontificum Romanorum* from 1198-1304, in continuation of Jaffé's well-known work, up to the migration of the Popes to Avignon. No less than 30,000 documents have been excerpted by this indefatigable scholar; 6000 relating to Innocent III. alone, whilst Delisle's elaborate collections contained only 3000 bearing on this pope. It has been awarded a double prize by the Berlin Academy of Science.

New Publications.

APPENDICE au Mémoire présenté par le Gouvernement de Sa Majesté Britannique. T. II^e: Correspondance concernant la Florida, l'Alabama, la Georgia et le Shenandoah. Paris.

ARND, E. Geschichte der Gegenwart. 3. Bd. (1867-71). Leipzig: Duncker.

BEKYNTON, Thomas (Secretary to King Henry VI., and Bishop of Bath and Wells), Official Correspondence of. Ed. G. Williams. 2 vols. (Rolls Series.)

BLUNTSCHLI'S Staatswörterbuch. Zürich: Schulthess.

GARNIER-PAGÈS. Histoire de la Révolution de 1848. T. X. Paris.

HAMEL, E. Histoire de la République française sous le Directoire et sous le Consulat. Paris.

LANGERFELDT, G. Kaiser Otto IV. Hannover: Rümpler.

MATTHAEI PARISIENSIS Chronica Majora. Ed. H. R. Luard. Vol. I. (Rolls Series.)

MEYER, Chr. Das Stadtbuch von Augsburg. Augsburg: Butsch.

ROPP, G. v. Der Erzbischof Werner v. Mainz. Ein Beitrag zur deutschen Reichsgeschichte d. 13. Jahrhds. Göttingen: Vandenhoeck u. Ruprecht.

SCHRICKER, A. Zur Geschichte der Universität Strassburg. (Festrede.) Strassburg: Schmidt's Universitäts-Buchhdg.

SCHUM, W. Die Jahrbücher d. Sanct-Albans-Klosters zu Mainz. Göttingen: Vandenhoeck u. Ruprecht.

WELLINGTON. Supplementary Despatches. Vol. XIV. Murray.

Philology.

Thucydides I. With Collation of the Two Cambridge MSS. and the Aldine and the Juntine Editions. By Richard Shilleto, M.A., Fellow of Peterhouse, Cambridge. Bell and Daldy.

IN giving to the long expectant public a small part of a work promised, as Mr. Shilleto admits, nearly nine years ago, and contemplated, perhaps commenced, nearly three times that number of years from the present, the editor makes some apologies, which his many literary friends and admirers will read with regret, on the score of over-tasked energies and repeated attacks of bodily ailments. The portion now published bears some marks of being an unfinished and fragmentary performance. There is no preface, properly so called, a very scanty index of a page and a half, and, generally, an avoidance of the many literary topics surrounding the greatest work, perhaps, of the greatest period of Greek literature. These, or some of these, we may perhaps yet hope to see discussed. Meanwhile, as a contribution to verbal and grammatical scholarship, rather than from any special critical novelties or improvements in the text, this work will be accepted with gratitude and thoughtful attention by those who, few in number though they may be, adhere to the school of Porson and Dobree, or of their modern German representative, Cobet.

Mr. Shilleto speaks of his collation of the two Cambridge MSS. which he has consulted in terms rather exaggerating the real labour and time required. A month or three weeks would complete the most accurate and painstaking collation of a single book, where only two MSS. were to be examined, provided, of course, that they were not particularly difficult to decipher. We do not find that any gleanings of special importance have been derived from these two MSS., both of which have been before collated by Arnold and others. But the Clarendon MS., which is known as N, seems one of the best; and it is at least a satisfaction to have before us so very perfect a collation as Mr. Shilleto has given us. He considers the writer of it to be the same as the transcriber of the famous Sancroft MS. of Herodotus, preserved in Emmanuel College Library at Cambridge. This latter MS., which is beautifully written on fine glossy paper, Gaisford and Blakesley assign to the twelfth century, Mr. Shilleto to the fifteenth. It is singular that a difference of four centuries should occur in the estimate of such eminent scholars! In the opinion of the present writer, who has often seen it, the Sancroft MS. belongs to the earlier period of the fourteenth century.

It is to be feared that Mr. Shilleto has spent a good deal of labour to but little purpose, in his collation of the Junta edition of 1526. It is evidently a mere reprint of the Aldine, with just here and there a slight correction introduced; but there is not the slightest appearance of any other MS. having been employed.

The critical notes in this edition are couched in terse and often abbreviated Latin; the exegetical notes are in English. Both are, occasionally, we will not say desultory, but ranging off into questions of minute scholarship not very directly bearing on the text of Thucydides. The impression therefore left on the reader is rather that of an overflowing mind drawing freely on its stores in the cause of general scholarship, than of a strict interpretation, such as Poppe has given, of the author's meaning, or the simple notation of readings such as that accompanying Dr. Arnold's text. In

truth, Mr. Shilleto's work is a reaction from the more generally philological character of Arnold's edition, viz. one in which questions of history, geography, and antiquity were freely and genially discussed, and a return to the kind of scholarship from which Arnold's book was itself a reaction, that hard and dry critical and grammatical *ἀκρίβεια* that constituted the discipline under which most of our eminent classical scholars were trained. In the art of translation Arnold stands paramount; he was not invariably very accurate, but then he had a most happy knack of giving, in beautiful and appropriate English, both the sense and the spirit of the most difficult and entangled parts of the speeches. Mr. Shilleto does not in general translate more than a sentence, and here and there a little more elegance of expression might have been desired. For instance, in chap. xx. the words—*τὰ μὲν οὐν παλαιά τοιάντα ἄφον, χαλεπὰ δύτα παντὶ ἔτης τεκμηρίω πιστένται*, Mr. Shilleto renders, "Such have I found older events to be, albeit difficult for one, hardly allowing one, to give credit to every link in the chain of argument." This does not read quite neatly; and is not *τεκμηρίω* rather the ablative than the dative, "though hard to believe in *by* each consecutive proof"? We might wish Mr. Shilleto had said something here on the singular fact, that such a writer as Thucydides, who as late as B.C. 400 was taking every possible pains to investigate early Grecian history, nowhere refers (except once, we believe, in i. 97, to Hellanicus) to any written literature, but always speaks of *ἄκον*, "hearsay," and personal research and enquiry. How can this fact be explained, if the common opinions about the antiquity of a Greek literature are true? In his note on chap. xx. Mr. Shilleto admits that "it may be questioned whether Thucydides alludes to Herodotus at all." But to return to ablative *versus* dative; in chap. xxv. *Κορινθίων ἀνδρὶ προκαταρχόμενοι τῶν ιερῶν*, Mr. Shilleto translates, "in compliment to a Corinthian commencing the initiatory parts of the sacrifice of victims." Rather, one would suggest, "beginning the sacrifices *by* (or with) a Corinthian." Just below, *ναυτικῷ δὲ καὶ πολὺ προέχειν ἔστιν ὅτε ἐπαιρόμενοι*, Mr. Shilleto gives us a somewhat slip-shod version as the literal meaning, "lifting themselves up that they were," or "lifting up their voice that they were" (superior in naval force). It is simply "elated by the *idea* that they were," &c., *ἐπαιρόμενοι* meaning *δοκοῦντες, νομίζοντες*, with a notion of conceit and self-confidence.

There is a difficult passage in chap. xxxiii., where the editors have not generally seen that we should read *καταθήσεθε*, and so have been puzzled between the corrupt readings *ώς ἀν μάλιστα καταθήσεθε* and *καταθήσεθε*. The future follows the preceding *ποιήσεθε*, and the sense is thus quite simple; "you will store up for yourselves our gratitude, with as lasting a testimony of it as men can possibly have." The ellipse after *ώς ἀν*, viz. of *δράσεαν* or some similar optative, is far from uncommon. Mr. Shilleto translates, "you will have an advantage by having received us in our greatest peril, to the end that you (if you receive us) may bestow the obligation with the most certain and never forgotten evidence."

In chap. lxix. Mr. Shilleto gives his high sanction to the (as I think) more than questionable doctrine that *χρῆν*, *ἔχρῆν*, *χρῆνται*, *χρεῖν*, &c., which have the regular inflections of an impersonal verb, are contractions for *χρὴ ἦν*, *χρὴ εἴναι*, &c., where he regards *χρὴ* as an indeclinable noun, like *Θέας*. He says *ἔχρῆν* is formed on a false analogy; a proposition no one is bound to accept on the evidence of a very doubtful passage in Soph. *Oed. Col.* 504, where *χρῆσται* is supposed to stand for *χρὴ ἔσται*. Probably *χρεῶν* is a neuter adjective, and not a corruption of *χρὴ ὄν* at all. Compare *πλέων*, and the nouns *χρεῶ* and *χρέων*.

Another doubtful doctrine is that *ἀἴρων* in chap. xc. may be an aorist. "There might," he says, "be an aorist *ηρά* [sic] and so a subjunctive *αἴρω*." But *ηρά*, if a possible form, would become *ἱρά*, and *αἴρων* *ἱρών*, so that this would be a return to the now generally rejected cacography *ἔφηρα* for the aorist of *φαίνω*. The epic aorist *ῃρά* is formed regularly from *ἀείρω*. The passage in the text, on which Mr. Shilleto has a long note, *ἐπισχεῖν μέχρι τοσούντος ἔως ἂν τὸ τεῖχος ἵκανον αἴρων*, is really a confusion between two different constructions, *ἔως αἴρουσιν*, "whilst they are raising," and *ἔως ἂν ἀρωσιν*, "till they shall have raised."

In chap. cxx. *ὅσοι Ἀθηναῖοι ἥδη ἐνταλάγματα* can only mean, "who have had dealings with the Athenians." It is a strange phrase, no doubt, for *ἐν ἀλλαγῇ ἔγενονται*. (Madvig's correction, *ἐν ἀλλαγῇ ἥσαν*, is a perfectly obvious one, and was long ago made by the writer of this article.) Mr. Shilleto says the verb "seems to convey no meaning except *permutati sunt, mutati sunt invicem*." We must not always be the slaves of examples, especially in the use of verbs acknowledged to be of rare occurrence.

In chap. xviii. *δινάμει ταῦτα μέγιστα διεφάνη*, the meaning seems to be *διέπερτε*, "were seen to be the greatest in power among all the rest." Mr. Shilleto says, "were found on trial, when put to the test." Compare *διεφάνησαν* in vi. 17. In chap. xiii. *τριήρεις* (*λέγονται*) *πρώτον ἐν Κορίνθῳ ἀνατηγηθῆναι*, the *ἐν* is simply repeated, and perhaps, indeed (as one good MS. has *πρώτο*), it should be omitted before *Κορίνθῳ*. Anyhow, it does not seem clear how "the preposition added to the verb gives additional strength."

In chap. xci. Mr. Shilleto proposes *αὐτοπτῶν δὲ ἄλλων ἀφικνούμενων*, objecting to the article in the vulgate, *τῶν δὲ ἄλλων ἀφικνούμενων*. This seems only an example of that brachylogy so common with the Greeks—"when the others kept coming (who took a serious interest in the matter)," &c. Ingenious as *αὐτοπτῶν* may be, it hardly reads well immediately after *αὐτοῦ*, and at least cannot be considered a necessary alteration. Thus we are not driven to the strait in which Mr. Shilleto finds himself placed, because "*τῶν δὲ ἄλλων* cannot be used for *ἄλλων*."

Some few further points might be criticized; but scholars will prefer to give this book, as a whole, what it well deserves, a careful and thoughtful perusal throughout, and they will rise better scholars than when they sat down to it.

F. A. PALEY.

La Roche's *Iliad*. [*Homer's Ilias, für den Schulgebrauch erklärt von J. La Roche.*] Berlin: 1870-71.

THE *Iliad* of Professor La Roche appears in a form which does not do justice to its great merits. It professes to be an edition for the use of schools: there is therefore no complete *apparatus criticus*, like that of his *Odyssey*, nor is there any exhaustive discussion of difficult passages. Yet the textual criticism of Homer is materially advanced by the work. Besides making full use of his previous researches (published in his *Text, Zeichen und Scholien des berühmten Codex Venetus*, Wiesbaden, 1862; *Die Homerische Textkritik im Alterthum*, Leipzig, 1866), Professor La Roche has now collated for the first time several other MSS. of great importance, and incorporated the results in this edition. The collations, however, are not given in full: and those who use Professor La Roche's *Iliad* may be at a loss for the key to his mode of referring to his MSS. Such a key, it may be worth while saying by the way, is to be found in the preface to the *Homerische Untersuchungen*, p. v, and in the edition of Professor Ameis, part 2 of the appendix, p. 2. The chief new materials are: the second Venetian MS. and two Florentine MSS., both of considerable value. Two Vienna MSS. (*Vindob. No. 5 and No. 39*), a Stuttgart MS., and two

other Venetian MSS. are of minor importance. The result is, not indeed a critical edition of the *Iliad*, but an improved text, and a valuable contribution to the edition of the future.

In the field of interpretation, Professor La Roche has distinguished himself by a series of researches into the grammar and prosody of Homer, of which the *Homerische Untersuchungen* form only a part. The chief fruits of his conscientious and scholarly labour are embodied in the notes to this edition. In this case, too, the form which he has been led to adopt is unattractive and somewhat inconvenient. If the scholars of the Austrian gymnasia look out all the parallel passages to which references are given, they will certainly learn a great deal about Homer, and learn it on a very sound method; but we fear that in this country at least few have sufficient patience for the task. It must be added that the book is not very carefully printed. Many of the references—usually of so much value—are made comparatively worthless by a wrong figure. Among other misprints not corrected in the tables of errata may be noticed: i. 66 (note), M for II; ii. 812 (note), ἀνάευθε for ἀπάνευθε; iii. 296 (note), ψ 220 for Ψ 220; iv. 421 (note), Δ 117 for Λ 117; vi. 119 (note), 876 for B 876; ix. 456 (note), "Vermutungen" for "Verwünschungen"; ix. 601 (text), κάκιον for χαλεπόν (i.e. the vulgate is condemned in the commentary, but retained in the text); xi. 419 (note), ἐστείναρο for ἐστείνορτο; xii. 37 (text), μάρτια for μάστιγι. In one or two places (i. 112, v. 478, vii. 64) the appendix is referred to, but no corresponding note is found there. At i. 87, εῖσι is called a plural, doubtless by an oversight. We cannot agree with Professor La Roche in scanning vii. 88,

μητὸς πολυκλῆσθι πλέων ἐπὶ οἴνοι πόντον.

It is to be hoped that Professor La Roche will not merely have ample opportunity in future editions of correcting the printing of his *Iliad*, but that he will enlarge the plan on which it is composed. No one knows better the value of the materials which, as we learn from him, lie still unused and almost forgotten at Florence, in the Escorial, and in more than one English library.*

D. B. MONRO.

THE PHILOLOGICAL CONGRESS AT LEIPZIG.

THE twenty-eighth *Philologenversammlung* took place at Leipzig on the days from the 22nd to the 25th May, and deserves notice in more than one respect. As has been observed in a previous report on the Congress at Kiel (*Academy*, vol. i. p. 59), "the utility of such a meeting is not to be measured by its Transactions," though we believe that this year's *Transactions* (to be published by Messrs. Teubner) will not be inferior to any one of the records of the doings of former meetings; but this time the quickening influence of a large social gathering and mutual exchange of ideas seems to have been realised to a greater extent than ever before. The number of philologists registered at the *Empfangsbureau* amounted, on the third day, to no less than 923, thus nearly doubling the number of the Kiel meeting, then stated by your correspondent to have been more successful than any previous gathering. It would be easy to pick out a long list of names respected and honoured throughout Europe, but it suffices to remind your readers of the fact that Leipzig itself, as it were the centre of the philological life of Germany (the glory of Bonn having, alas! past away for the time being), contains among its professors men of such worldwide fame as G. Curtius, F. Zarncke (the editor of the *Literarische Centralblatt*), Fleischer (the famous Orientalist), and J. A. Overbeck. To these it would be fit to add the equally famous name of F. Ritschl, the *alter sospitator Plauti*, had not

* Since these lines were written, the first part of Professor La Roche's critical edition has been announced as soon to appear. It is to be based, like the present text, chiefly on the two manuscripts Venetus A and Laurentianus Plut. xxxii. 15 (Hofmann's Laur. B). The *apparatus criticus* will contain the variations of four others collated by Professor La Roche, besides Eustathius and the fragments.

this scholar (for reasons which you will allow me to pass over) thought proper to abstain from participation in the meetings, though he did put in an appearance on Tuesday evening, when the newly arrived guests met for the first time in the splendid hall of the *Schützenhaus*, to shake hands and renew old acquaintances. Professor Ritschl had been chosen president in 1869 at Kiel, but when 1870 and 1871 had changed the political aspect of things so much, Ritschl withdrew from this office, and his place was filled by Professor G. Curtius, with the greatest tact and, it should be added, occasionally under very trying circumstances. The opening speech delivered by this illustrious scholar dwelt, as was unavoidable under the present bias of national feeling in Germany, on the great events which had caused the repeated postponement of the meeting from 1870 to 1871 and 1872, and he endeavoured to trace the connection of philological pursuits with the development of national spirit and patriotism. The second part of this speech was specially devoted to the illustration of the growth of Philology itself, when the speaker entered into his favourite subject of the bearing of Comparative upon Classical Philology. The first paper was by the president's brother, E. Curtius (the historian), who gave an interesting account of recent discoveries at Pergamon, together with a sketch of the history of the city. Though one of the earliest towns in Asia Minor, it is not noticed by any writer before Xenophon, and most of the ruins belong to the time of the dynasty of Attalus. It was observed that after the English and French explorers of Asia Minor, Germany was at last beginning to take part in these discoveries, and many of the members were no doubt startled by the communication that our famous Moltke had previously gained laurels in the peaceful task of exploring Asiatic cities and regions. Of great interest were two recently discovered inscriptions, the one of which contains a long list of the names of *Ephesus*, showing that this institution was not confined to Greece proper, but had also made its way to the outlying posts of Greek civilisation.

Among the papers of the second and third day, the foremost place is no doubt due to an excellent and lucid paper by Professor Delbrück, of Jena, on the results of Comparative Syntax. After showing that the syntactical peculiarities of the Vedas greatly resemble those of Homer, it was observed that the finite verb, though best developed in Greek, would appear to have existed in its main features in the original speech of the Aryans, and instances were given of the late origin of a conditional tense in Sanskrit and Greek. It was admitted that the study of the Asiatic languages was the best way of learning to admire the simplicity and neatness of the Greek syntax. The main difference of Sanskrit and Greek was then found in the treatment of the *verbum infinitum*, and the construction of the accusative with the infinitive was stated to be peculiar to the classical languages. All secondary clauses were then proved to have been originally primary and independent sentences, which was illustrated by the peculiar treatment of *oratio obligua* in Sanskrit and Greek. The early Aryan speech appears to have been destitute of a relative pronoun, and it was maintained that the root *yá* in Sanskrit had originally only an "anaphoric" sense. The question as to the origin of hypothetical sentences was designated doubtful, though it appeared probable that the *ei* of the Greeks was derived from a root with a demonstrative meaning. This instructive paper was followed by some equally interesting observations of Professor Lange, who laid great stress on the necessity of a scientific syntax of the Homeric language, and while allowing the merits of the well-known work of K. W. Krüger, still contested the standpoint of the writer, which was no longer in harmony with the progress of modern Comparative Philology.

After a somewhat tedious paper of Dr. Trieber on the *reλη* of the Spartans (which were identified with the Ephori, but distinguished from the general expression *oi εἰ reλεῖ*), the next paper was read by Director Hasper, of Glogau, on the scene of the *Iliad*. The speaker was opposed to the assumption that Homer's Ilios lay on the same spot as the Ilion of a later age, and inveighed against the futile attempts of the notorious Herr Schliemann to discover the site of Troy in agreement with the tradition of the contemporaries of Alexander the Great. Accurate and elaborate as Dr. Hasper's paper was, we are inclined to attach far greater weight to the excellent observations, subsequently made by Professor W. Clemm, of Giessen, who justly questioned the possibility of deriving direct geographical state-

ments from such a poem as the *Iliad*, whose author should not be treated as a careful writer of military events, but as a poet frequently carried away by his imagination, and whose exactness in geographical details should not be insisted on too much. Director Stier made some observations on Homer's Scamandros, which he identified with the modern Mendré.

Another highly interesting paper was Professor A. Schöne's essay on Greek reliefs, chiefly in connection with inscriptions. The professor has a work on this part of archaeological study nearly ready for publication (copies of which were shown to the meeting), and it may be hoped that his lecture will cause many scholars to study these works, which go far to acquaint us with the various phases of ancient Greek life.

Dr. Müller's elaborate essay on Plotinus could not be heard in full on account of the shortness of the time of the third day, and in the same way the Rev. Mr. Whitford's proposal to form a committee for the framing of a universal linguistic alphabet was dismissed without discussion. Dr. Tischendorf distributed specimens of a new Greek type, imitated from the MSS. of the eighth and ninth centuries.

Among the various Sections the transactions of that on Education were of special importance. It may be stated that the proposal of removing the free Latin Essay (which now forms part of the final examination at German colleges, *Maturitätsprüfung*) was rejected with a great majority, the meeting being of opinion that the power of writing a free Latin composition was, so to say, the central point and test of the classical training of this country. An animated discussion was caused by the spirited and energetic lecture delivered by Director Kruse (of Greifswald), concerning the charges brought against the German colleges, that their peculiar course of studies was onerous and hurtful to the mental and bodily development of the students. Without denying the justice of these charges in but too many cases, the meeting seemed to be of opinion that such perverse results were the consequence of individual faults both of masters and pupils, but not of the existing laws on the degree of knowledge to be attained, though much blame appeared to fall on many of the Prussian *Schulräthe*, who exaggerated their demands to a degree sometimes quite preposterous. Instances of this perversity, which would be amusing if they were not so very sad at the same time, were produced in regard to the exorbitant amount of knowledge chiefly insisted on in a branch of instruction which ought to be excluded from examination altogether, we mean religion. It is to be desired that this discussion will exercise some influence on the Prussian authorities (represented at the meeting by Geh.-R. Wiese) in framing the new law on the Examinations which is said to be shortly forthcoming.

The most interesting features of the Archaeological Section were the explanation of an elaborate plan of the battle of Cannae by Herr Schillbach, of Potsdam, and the exhibition of a large number of coins in the collection of Herr Imhoof, of Winterthur. In the German and Romance Section elaborate papers were read on the laws of *Auslaut* in the Lithuanian, Slavonic, and Gothic languages, by Dr. Leskien; on the German oases in the non-Germanic countries of the Austro-Hungarian monarchy, by Professor Schröer, of Vienna; and especially a capital, and in parts very witty, paper by Professor Hildebrand (one of the editors of the continuation of Grimm's *Dictionary*), on the identification of possessor and possession in popular speech, or, as the author himself entitled it, *über Land und Leute*. There were also papers by Dr. Schuchardt (the author of the well-known work on Vulgar Latin), on some syntactical modifications of initial consonants in the Dialects of the Centre and South of Italy; and by Professor Gröber on a hitherto unknown branch of the *Chanson de geste Fierabras*. The Section for Modern Languages (which was first formed at this meeting, but at once amounted to no less than fifty-eight members) offered a very valuable paper by Dr. Mahn (well-known to the possessors of the latest edition of Webster), on the Iberian element in the Romance languages; but as it chiefly consisted in a number of etymologies, it would be difficult to give an abstract of this lecture. Dr. Schmidt, of Falkenberg, lectured on the pedagogic value of English syntax, a position, as it seems to us, very difficult to prove. It should finally be added that the Oriental Section occupied themselves with a lecture by Professor Sachau, of Vienna, concerning the historian Al Biruni* and a

proposed edition of his works, and another by Professor Brugsch on some hieratic papyruses of the museum at Bulak, containing Egyptian rules on the practical conduct of life. Another lecture by the same scholar, on the present state of instruction in Egypt, was not given, owing to his sudden departure. You will excuse my not saying anything on the Mathematical Section; but let a reporter try to be ubiquitous as much as possible, he must sacrifice some parts of the transactions of a congress combining so many various elements as the Philological Congress at Leipzig undoubtedly did.

Hitherto only one side of the Transactions has been sketched; we have to add a few words on the social aspect of the Congress. The arrangements were excellent; the great dinner on the 22nd splendid, the toasts numerous, the convivial enjoyment loud and undisguised, though never boisterous; the wine abundant and prime. On the 24th an express train conveyed the philologists to Grimma, where the city of Leipzig had provided an excellent entertainment at the Gattersburg, on the romantic banks of the river Mulde, and where the beautiful walks in the surrounding woods were visited by large troops of philological excursionists. Capital also was the performance of Beethoven's *Fidelio* at the new *Stadttheater*, which is in itself worth seeing, and which was placed at the service of the philologists by the manager. In fact, it may be added that everybody at Leipzig did their best to welcome their philological guests, many of the citizens having placed rooms at the disposal of the committee, and all sights being thrown open to the visitors. Surely all who were present at this year's meeting will have left Leipzig with the feeling of content and gratitude which was eloquently expressed at the close of the meetings on Saturday by Director Classen, of Hamburg, one of the oldest members of the Congress.

In selecting the place of the next meeting the assembly were led by political and national motives. In this new empire of ours we feel that there is still one brother left outside whom we should be sorry to lose—a feeling enthusiastically expressed in the reception given to an Austrian speaker. The German element in Austria stands in need of any support and countenance that can be afforded to it; and owing to this it was resolved to meet next year at Innspruck, in the Tyrol, whence a kind and pressing invitation had been sent. Professor Jülg, of Innspruck, cordially accepted the resolution in the name of his town; and thus we parted to return to the duties of our work, which had been most pleasantly broken by the Congress, of which I have endeavoured to give you a short sketch.

W. WAGNER.

NEW PHILOLOGICAL PERIODICAL.

WE have too long delayed giving an account of a new periodical which promises to be of great importance to classical philology. The *Ephemeris Epigraphica*, of which the first number appeared at the beginning of the year, is intended to appear four times a year as a perpetual and growing supplement to the *Corpus of Latin Inscriptions*. Instead of being scattered here and there in the various philological journals, and buried under a heap of other matter, all newly found inscriptions will be inserted in its pages under the direction substantially of the same editors as those of the *Corpus*. But inasmuch as the greatest number of new discoveries are made in Rome itself or its neighbourhood, the projectors of the undertaking have done wisely in attaching it rather to the Roman Institute of Archaeology than to the Berlin Academy. The *Bullettino* and *Annali* of the Institute are already known to scholars in this department of learning as the least imperfect repertory of such matters. Nor is it a slight benefit that by this means the editors of the *Corpus* associate with themselves the honoured name of De Rossi.

The usefulness of such a work is self-evident, and we cordially recommend it to our readers' support. English scholars should be urged to communicate to Professor Mommsen in Berlin or Professor Henzen in Rome any new discoveries that may come under their notice either here or elsewhere. Communications may be made in Latin, which is to be the language of the *Ephemeris*, but they will be readily translated by the editors from any modern language. The importance of a single isolated inscription is seldom apparent, though, when compared and co-ordinated with others in the hands of an expert, it may be made to give very telling and decisive evidence. The science of inscriptions is almost as conclusive in its method and results as that of comparative anatomy. A single fragment will often be

* See *Academy*, vol. x. p. 506.

enough to restore at least the general outlines of a comparatively long document, and to determine its date and circumstances.

Only for the perfection of such a science it is necessary that all facts bearing upon it should be immediately made known to all who have an interest in it, that they should be systematically classified and rendered easy of reference, after undergoing a thorough sifting and testing process. The *Ephemeris* will, it is hoped, make the fulfilment of these three conditions possible, supplying : 1. Immediate information ; 2. Scientific examination ; 3. Systematic arrangement. The final arrangement will not and cannot take place at once, but will be delayed till the time when it is thought fit to issue regular supplementary volumes of the *Corpus*. Of this at present three parts alone are published : I. The most ancient, containing inscriptions up to the death of Julius Caesar ; II. Those from Spain ; and IV. The Pompeian wall-inscriptions. The first number of the *Ephemeris* contains additions to all of these, as well as dissertations on certain kindred subjects. The supplements to the first volume consist chiefly of writings on works of art, cups, chests, and mirrors, especially from Praeneste and of names from the sepulchres of the same place. It may be a new fact to our readers (though noticed some years ago in the journals of the Institute) that the words on the Cista Ficoriana are to be read *Dindia Macolina fileai dedit*, not, as was always read before, *filea*.

The form *Jovos* for *Jupiter*, on a chest also from Praeneste, and the name *Vibis Pilipus*, i.e. *Vibius Philippus*, on an early mirror from the same place, are remarkable. In the additions to the *Fasti Anni Juliani* we notice the remark that the name *Juturna* should be rather *Diuturna* (p. 36), another instance of *Fidi* for the dative case (p. 39), a substantiation of the name *Juno curritis = quiritis*, and a reference to a sacrifice to *Feronia*, till now regarded as a purely Latin, not a Roman goddess (p. 41). Among the Spanish we remark especially the *tessera hospitalis*, described and commented on in *Hermes*, vol. v. The Pompeian supplements are but few; but we observe that Herr Zangemeister accepts as a better reading than his own the distich given in the *Academy* of September 15, 1871 (vol. ii. p. 444), *Quoi scripti semel, &c.*, from an early copy by the Bishop of Lincoln.

The rest of the number contains four sets of *Observationes Epigraphicae*, by Professor Mommsen. The first is an explanation of the epigram *Ursus togatus vitrea qui primus pila* (Orelli, 2591), in which he shows that *togatus* is probably not a proper name, but means simply "Roman," and that Ursus was not a freedman. The second is a genealogy of the Junii Silani, and explains their relation to the imperial family. The third, *de fide Leonardi Gutenstenii*, is a curious and useful paper on the frauds of the early editors of inscriptions. The fourth contains some grammatical notes *ex actis Arvalium*, and proves, for instance, that *conlega*, *conlegium* were the forms in use up to A.D. 32, and that afterwards *collega*, *collegium* came into use except during the reign of the antiquarian Claudius. The second number, recently published, contains no additions to the *Corpus*, but some interesting papers and discussion. G. Wilhelms traces the history of the *Praefectus castrorum* and *Praefectus legionis* in connection with the establishment of a purely military power. W. Dittenberger discusses some Attic *tituli ad res Romanas spectantes*. E. Bormann emends and combines fragments of three inscriptions on public buildings in Rome, the first of which is important. Lastly, Professor Mommsen continues his *Observationes Epigraphicae* with his usual acuteness and wide experience.

J. WORDSWORTH.

Contents of the Journals and Intelligence.

The Indian Antiquary, part v. (May).—Sketches of Mathurâ ; by F. S. Growse. [Continued ; accounts of the twelve *Bans* (*vanas*) or forests, mentioned in the *Mathurâ-mahâtmya*, and connected with Paurânic legends ; also of the twenty four *upabans* which are said to refer mainly to Râdhâ's adventures, and to have no ancient authority whatever.]—On the Treatment of Oxytone Nominal Bases in Sanskrit and its Derivatives ; by J. Beames. [Sanskrit nouns ending in accented *a* are shown generally to end in the mediaeval languages in *au*, and in the moderns in *o* or *â* (viz. *â* in Hindi, Bengali, Panjâbi, Uriya and Mârâthi ; *o* in Gujarati and Sindhi) ; while Sanskrit nouns in unaccented *a* end in mediaeval languages in *u*, and in the moderns in *u* or *a*, or entirely reject the final vowel.]—The Cave of the Golden Rock, Dambula, Ceylon ; by T. W. Rhys Davids. [Sir E. Tennent mentions one inscription in this rock-temple, which was translated for Turnour

by Mr. Armour. Mr. Davids has discovered eleven more, and now gives the oldest and most interesting inscription. From this inscription it appears that the temple was founded, not by Walagam Bâhu about 86 B.C., as stated by Tennent, but in the time of Devânampiya Tissa (B.C. 246), the ally of Aśoka, and friend and patron of Mahindu, who introduced Buddhism in Ceylon.]—An Old Canarese Inscription from the Belgâm District ; by J. F. Fleet. [Taken from a stone tablet which stood originally in front of a small temple of Śâṅkara in the bed of the river Malaprabhâ.]—The Hot Springs of Unâ ; by W. Ramsay.—Oudh Folklore : a Legend of Balrampur ; by W. C. Bennett.—Bhavabhûti in English Garb ; by K. M. Banerjea. [Account of Bhavabhûti's Sanskrit dramas *Mâdratracharita* and *Uttarârdhamâcharita*, translated by Pickford and Tawney respectively.]—Review [favourable] of P. Boyd's translation of the Sanskrit Buddhist drama *Nâgârñanda* with an introduction by Prof. Cowell ; by A. H. B.—On the Ancient Remains in the Krishna District. [From the Report of the late Mr. J. A. C. Boswell to the Madras Revenue Department.]—The Asiatic Societies. [Extracts from their Reports and recent publications.]—Notes on the Bhillâris ; by C. Scanlan. [This hill-tribe is here considered to belong to the great Gond family, though in their language and some of their customs they differ totally from the Gonds, with whom they neither eat nor drink nor intermarry. They acknowledge, however, the law of Camjhana, which imposes a servitude of some years on a man, wishing to marry into a family, who cannot afford the usual marriage settlement and to give presents to the bride's relatives. There are eighteen Bharia *gots*, or clans.]—Notes, Queries, &c. [Amongst others, a query, by H. Blochmann, on the age of the use of tobacco in India.]

The Phoenix, November to February. (Philological articles.)—The Casket of Gems, a Tale from the Chinese ; by Dr. Birch.—Buddhist Philosophy ; by B. H. Hodgson (continued).—The Sîrangama Sûtra ; by S. Beal.—Sunt'aun p'u, the Siamese Shakespeare.—Outline of a Japanese Drama.—Japanese Proverbs.—Reviews : De Rosny's *Anthologie japonaise* ; and Turretini's *Atsume Gusa* ; by W. G. Aston. [Both works, especially the former, deficient on the score of accuracy, but useful for general readers.]

The Indian Government has, if we may trust the reports of Indian newspapers, resolved to send out an European scholar to occupy the Sanskrit chair in the Government College of Madras, temporarily held by a native student, M. Seshagiri Shâstri. If such is really the case, it is to be hoped that the choice of the government will fall on a genuine Sanskrit scholar; as such a one alone can be expected to command the respect of native students, and to impart a new life to Sanskrit studies and literary research, which, in spite of the vast and tempting materials there offering themselves to the enthusiastic student, have for many years been at a very low ebb indeed.

Professor Albrecht Weber has just finished the second volume of the *Taittirîya-Samhitâ*, containing Kândas 5 to 7. He has added to this volume a special representation and criticism of the Padapâtha of the *Taittirîya-Samhitâ*—a survey of the ritualistic employment of the single Anuvâkas—the text of the *Kândînukramâ*—an alphabetical list of the rik-prâtikâ, not only for the Samhitâ, but also for the Brâhmaṇa and the Āranyaka. The Anuvâkaprâtikâs for the three texts have likewise been added.

New Publications.

- AHLWARDT, W. Bemerkungen üb. d. Aechthcit der alten arab. Gedichte. Greifswald : Bamberg.
- ANTHOLOGIA PALATINA, Epigrammatum cum Planudeis et appendice nova epigrammatum veterum. Ex libris et marmoribus ductorum, annotatione inedita Boissonadii, Chardonis de la Rochette, Bobbii, partim inedita Jacobisi, metrica versionis Hugonis Groti et apparatu critico instruxi F. Dübner. Graece et Latine. Vol. II. Cum indicibus epigrammatum et poetarum. Paris : Didot.
- BÖHTLINGK, O. Indische Sprüche. Sanskrit u. deutsch. 2. verm. u. verb. Aufl. Leipzig : Voss.
- DE ROSNY, Léon. Variétés orientales historiques, géographiques, scientifiques, bibliographiques et littéraires. 3^eme ed. Revue et corrigée. Paris : Maisonneuve.
- LEO, H. Angelsächs. Glossar. 1. Abth. Halle : Buchh. d. Waisenh.
- MÖBIUS, Th. Die altnordische Sprache. Halle : Buchh. d. Waisenh.
- PRÄTORIUS, Fr. Beiträge zur Erklärung der himjarischen Inschriften. Halle : Buchhandlung des Waisenhäuses.
- SAYCE, A. H. An Assyrian Grammar for Comparative Purposes. Trübner.

ERRATA IN NO. 49.

- Page 202 (a), line 34, for "Alcasyarquivir" read "Alcassarquivir."
 " " " line 3 from bottom, for "Förteching" read "Förteckning."
 " " " (b), line 24, for "Oswald und Orendel, read Oswald and Orendel.
 " 202 (a), line 26, for "Bisschopp" read "Bisschop."
 " " " line 12 from bottom, for "Borman's" read "Bormans."
 " " " (b), top line, for "But en as a double negative" read "But the omission of en as a double negative."

THE ACADEMY.

"INTER SILVAS ACADEMIA QUARERE VERUM."

Vol. III.—No. 51.

Readers are reminded that the mention of New Books, Articles, &c., in our lists is intended as a guarantee of their importance. The Editor of THE ACADEMY cannot undertake to return communications which are not asked for. The next number will be published on Monday, July 15, and Advertisements should be sent in by July 10.

General Literature and Art.

Rude-Stone Monuments in all Countries; their Age and Uses.
By James Fergusson, D.C.L., F.R.S., V.P.R.A.S., F.R.I.B.A., &c.
Murray.

This valuable and interesting treatise is the offspring of two other works by the same author, namely, his *Handbook of Architecture* (1854), and his *History of Architecture* (1864). In 1860, also, Mr. Fergusson contributed an article on the subject to the *Quarterly Review*, entitled "Stonehenge;" and in 1870 a further article in the same journal, entitled "Non-Historic Times," announced his latest views on the megalithic monument question.

Mr. Fergusson, therefore, may fairly claim the right of speaking with some authority, as an architect and antiquary, on the history and nature of these monuments, although it may not be correct to assume, as he does, that "no other antiquary . . . has gone so carefully and fully into the whole subject" (pref. p. vii) as he has done. Neither should it be held as conclusive evidence in favour of the correctness of Mr. Fergusson's opinions that no refutation followed the expression of these opinions in the *Quarterly* articles, especially as the articles in question appeared without that degree of weight and authority which the announcement of the writer's name would justly attach to them. An erroneous opinion may be many times expressed, and yet escape correction.

Failing other opponents, however, Mr. Fergusson becomes in some measure his own refutor. "On many minor points," he says, "I have offered suggestions which I do not feel sure that I could prove if challenged." These were made, he adds, "because it oftens happens that such suggestions turn the attention of others to points which would otherwise be overlooked . . . ; while, if disproved, they are only so much rubbish swept out of the path of truth" (p. ix). This practice may be allowable in a debating society, or may be adopted with advantage in contributing to a journal like *Notes and Queries*; but in a work of scientific character it is both inconvenient and objectionable. Where a subject is, moreover, already overlaid with difficulties such as yet retard the solution of this megalithic question, it is hardly justifiable for a writer of good authority to add to those difficulties by putting forward as statements founded on evidence what are merely tentative suggestions. Mr. Fergusson evidently feels this too, for he is rather severe on others guilty of a somewhat similar offence.

The author's opinion, as he candidly tells us, differs widely from that generally received. It has happened before now in the world's history that one man has been right and the rest of mankind wrong. But the reason which gives Mr. Fergusson confidence in the soundness of his views is merely that he has spent, as he says, the greater part of his life in studying the architecture of all nations.

VOL. III.—NO. 51.

The study of a question so complex as that presented by these megalithic remains might well occupy even the whole of a man's life without yielding the desired result; for the builders of these monuments have left no record of their erection, no legible inscriptions, nor "architectural features to reveal their history." And, even as Mr. Fergusson observes, the contents of these monuments being of a mixed character, consisting generally of bones, stones, iron, bronze, and gold, little dependence can be placed on the presence of any one class of objects to fix the age of these monuments "till it can be shown at what date their use did really cease" (p. 14). Reversing the process, Mr. Fergusson, instead of deducing the age of the monuments from the nature of their contents, endeavours to prove the age of the contents from that of the monuments in which they are found, the latter being by far the more difficult task.

The author's views regarding the age and nature of the class of Rude-Stone Monuments which form the subject of his work are briefly stated in the following propositions:—I. That they are generally sepulchral, or connected with the rites of the dead. II. That they are not temples in any usual or appropriate sense of the term. III. That they were generally erected by partly civilised races after they had come in contact with the Romans, and most of them may be considered as belonging to the first ten centuries of the Christian era. (P. 27.)

To the first of these propositions few competent antiquaries will object. The second will also find few dissentients, for the notion that dolmens were used as sacrificial altars by serpent-worshipping Druids is now well nigh exploded, although this class of remains will probably continue to be known for a long time to come by the name of "Druids' altars." Moreover, the qualification, "usual or appropriate sense," does not exclude the probability of dolmens and stone circles having been frequented for the celebration of funeral games in pre-Christian times. But the third proposition fixes the age of these monuments at too recent a date to receive the assent of archaeologists, unless based on indubitable evidence. And this evidence is wanting. It is not to be denied that sepulchral tumuli were erected in these islands, as well as on the continent, at dates long within the Christian era; but it does not follow that similar monuments were not also erected centuries before it. Even if it was clearly proved that King Corm and Queen Thyra were buried in the tenth century in the mounds in Jutland that bear their names (the chambers in which, it is to be remarked, were formed of oak, not of stone; p. 297), it may not be quite certain that the tumuli were erected at the time, for there is abundant evidence to prove that even as late as the sixteenth century the practice of burying in ancient mounds was not altogether abandoned, in these islands at least. Of this a reliable instance is recorded in the *Annals of Loch-Cé*, an Irish chronicle (Rolls Publ. 1871), under the year 1581, where it is stated that an eminent person was buried at (or in) the *duma* of Ballintober, in Connaught. This *duma*, or tumulus, must have been then of great antiquity.

Mr. Fergusson disputes that any of these megalithic structures belong to a pre-historic or even pre-Christian age. There is no evidence of their erection before those eras, he says, and therefore they must have been built later. They are not mentioned by the classic writers, and therefore could not have existed in their time. But he fully appreciates, of course, the weakness of such negative evidence. On the other hand, he seems to disregard too much the value of historical traditions, which assign to the monuments an age far beyond the limit he allows. These are only cobwebs of fable, woven by "poets and pedants," which he feels no

remorse in brushing away, substituting his own "impressions" for national traditions, and this sometimes in such an arbitrary manner as to leave no room for argument. Speaking of the history of King Arthur, he says: "This is not the place to examine so large a question. It will be sufficient to state what I believe to be the main facts. Those who do not admit them need not read further." (P. 133.) By adopting his suggestion the incredulous student will miss the incorrect etymology of "Cat Coit Celidon," the scene of one of Arthur's battles, which Mr. Fergusson gives four pages further on, where he says that "*Coit*," the second member of the name, "only so far as the dictionaries tell us, means 'coracle,' and" (as *Cat* means a battle) "would seem to indicate a struggle in boats." But *Coit* is explained by the ninth-century glossarist Cormac (*voce Salchuita*) as "a name for a *wood* in Combrecc," or Welsh. The English word "cot" had not then been adopted into Gaelic dictionaries.

"It is probable, after all," Mr. Fergusson says, "that it is from the Irish annals that the greatest amount of light will be thrown on the history and uses of the megalithic monuments" (p. 175). But this light will hardly be evolved by his process, which consists in setting aside, as totally unreliable the system of chronology and regnal lists on which these annals are based, and bringing together events and personages separated in the annals by wide periods of time. It suits Mr. Fergusson's theory of modernisation to bring into immediate contact the Tuatha De Danann dynasty, whose era the Irish annalists refer to a period long antecedent to the Christian era, and the dynasty of King Crimthann (circa A.D. 84); but if there is any element of truth in the historical traditions preserved in Irish MSS., from St. Patrick's age at least, the Tuatha De Dananns were so long extinct in Crimthann's time that they had already passed into fairies and gods, abiding in those hills and mounds some of which are now known to be chambered tumuli. And so far from the Four Masters having, "like truly patriotic Irishmen," carried back the history of their country to the Flood, they constructed no system of chronology themselves, but confined their labours to digesting the records which had descended to them from remote times. Granted that the minute details of a battle cannot be transmitted by oral tradition for a period of two thousand years, it is nevertheless credible that the bare record of important events may be preserved through that channel for at least ten centuries. The Gaelic-speaking people of the highlands of Scotland and Ireland still recite long lays and stories which Mr. John F. Campbell, that most excellent of *Shanachies*, will truly tell us have not existed in writing for perhaps six hundred years. On the subject of writing, too, Mr. Fergusson is not always a safe guide. Whether the art of writing was known in Ireland in or before the reign of Cormac Mac Art (A.D. 218–266), or was introduced by the Christian missionaries in the fifth century, as some authorities believe, has not yet been satisfactorily settled, but that it was extensively practised before the year 600 is very certain. This, however, is not the opinion of Mr. Fergusson, who considers that before the year 600 it was very little practised. In that year, he says, the Irish did not possess even a copy of their most celebrated literary monument, the *Táin Bó Chuailnge*, because "a mission was sent to Italy to copy one said to have existed there" (p. 196). But in the very passage from which he has drawn this conclusion (O'Curry's *Lectures*, p. 29), it is expressly stated that the copy in question had been carried eastwards (*i.e.* out of Ireland) at some previous time, by a "saoi," or sage.

Mr. Fergusson's examination of the history, extent, and character of the Irish monuments has been of too cursory a kind to justify him in expressing himself so positively as he

does regarding their age. "There may be other rude-stone monuments in Ireland," he says, "besides those described or alluded to in the preceding pages, but they can scarcely be very numerous or very important" (p. 237). Any one acquainted with the still unpublished materials of Irish history must know that the monuments hitherto discovered do not amount to a tithe of those mentioned in the Irish MSS., under various names, and referred to various ages and persons; and of those hitherto brought under notice, not one-fourth has attracted his attention. The magnificent three-chambered dolmen on the summit of Sliabh-Claire at Duntrileague, in the county of Limerick, has escaped him, although it has a history; and the majestic circle and standing stones near Lough Gur, in the same county, are not noticed. The ancient traditions respecting these latter remains, which were certainly taken down at the earliest period of written history, indicate that in the first century of the Christian era their age and uses were totally forgotten. A hundred others might also be enumerated, including the huge pillar-stones at Punchestown, near Naas—the remains of the "chorea gigantum," which Geoffrey of Monmouth describes (or others like them) as having been removed to Stonehenge.

The author's personal investigation of the Irish monuments, though fruitful and instructive, was really very limited, for he seems to have altogether passed by the province of Munster, with its numerous remains of antiquity. He has certainly been industrious in consulting published authorities on the subject of his work; but it is not his fault that the most accurate sources of information are as yet unavailable to all but the few acquainted with the tongue in which they are written. Until these are published, all attempts at deciding the vexed question of the age of these structures must prove futile. One or two instances may be sufficient to show the danger of arriving at conclusions on imperfect data. The sepulchral remains near Cong, in Mayo, and at Carrowmore, in Sligo (which Mr. Fergusson at one time attributes to the Tuatha de Dananns, and at another to the Danes), are represented by him as marking, respectively, the battles of a Southern and Northern Moytura. This "no Irish antiquary has ventured to doubt," he says. It is not because there are not good grounds for doing so, at least as regards the Southern Moytura, or Moytura-Cunga. That there were two battles of Moytura fought in Ireland before the Christian era seems certain; but the most ancient MSS. represent them as fought in the same place, and somewhere in the north of Connaught. Before the seventeenth century, the stony neck of land between Loughs Mask and Corrib was not regarded as the site of a battle of Moytura-Cunga, or Moytura of Cong; and the account of the first battle of Moytura, of which Mr. Fergusson seems to have read a translation, does not countenance the presumption that it was fought in a spot so unsuited to a great battle. There is no place near Cong called Magh-Tuireadh, and apparently there never was; but the existence of Cunga (or "Cunga-Feichin," Fechin's *angustia*, St. Fechin, ob. A.D. 664) probably suggested to the Four Masters, who were among the earliest to identify the first battle of Moytura with the southern Cong, the propriety of locating the site of the battle there.

But there were other places named *Cunga*, or Cong, in Mayo and Sligo; and an older authority than the Four Masters places the field of battle of Magh-Tuireadh-Cunga to the north-west of Loch-Cé (Roscommon county), and consequently in the county of Sligo (see *Annals of Loch-Cé*, introd. pp. xxxvi–xxxix).

Mr. Fergusson finds, as he thinks, an important piece of evidence to support his theory in the history of a dolmen near Ballina, on the west side of the river Moy, which he

assumes to have a date, and that date some time in the sixth century. It is, he says, the grave of four persons who were executed for murdering the grandson of a man who died A.D. 428. In this, however, Mr. Fergusson has been misled by Dr. O'Donovan; for the Irish MS. which the latter quotes as his authority (*Book of Lecan*, 237b), does not state, as he assumes, that the culprits were buried on the western bank of the Moy, opposite to Ard-na-riag (so called from their execution, *riag*), but implies that they were interred on the summit of the hill which is now known as Ardnarea, on the east side of the river.

When quoting others, however, Mr. Fergusson is not always correct himself. At p. 144, for instance, he cites Petrie's authority for the statement that a coin of Valentinian had been found in the mound of New Grange, whereas Petrie only said on the mound. His most serious offence in this line is where he attributes to the late Dr. J. Henthorn Todd opinions which are totally opposed to those entertained and often expressed by him. After fixing the era of the Firbolgs to his own satisfaction (B.C. 50), he says, "since the above was written, I have been gratified to find so eminent an authority as Dr. Henthorn Todd . . . arriving, by a very different road, at very nearly the same conclusion;" and quotes the assertion that the Firbolg "conquest of Ireland was not much older than Caesar's time, if it were not a good bit later," from "*Irish Nennius*, translated by J. H. Todd, Appendix C." There is no such appendix to the work; and the statements here gathered on Dr. Todd are found in No. 21 of the Additional Notes (p. c), which were all supplied by the late clever scholar, but fanciful critic, Mr. Algernon Herbert, as Mr. Fergusson might easily have seen by the initial (H.) at foot of the note, and the statement which Dr. Todd was careful to add in the title-page, fixing upon Mr. Herbert the responsibility for the opinions put forward in these Additional Notes.

Nevertheless, although Mr. Fergusson's views as to the age of these monuments may not meet with general acceptance, every archaeologist must thank him for producing a very valuable and interesting work, well written and beautifully illustrated.

W. M. HENNESSY.

Fifine at the Fair. By Robert Browning. Smith, Elder, and Co.

THE story of Mr. Browning's new poem—the outward action of the characters—is of the simplest. A Frenchman and his wife, Elvire, stroll out at Pornic, where the Loire and the sea unite; they visit a summer fair where the husband admires the peculiar beauty of Fifine, the dancing-girl; they walk down to the beach and to the Druidical remains, and so return to their villa, where there is pushed into the husband's hands a letter—the enigmatical result of that largess of coin he had slipped into the pleading tambourine of the spangled dancer. But the story—the slight action—is the least important part of the poem of between two and three thousand lines spoken by the husband of Elvire to Elvire, momentarily jealous—nay, pained, a little unreasonably—by the admiration Fifine has evoked, and by that outburst of praise of a Bohemian life and lawlessness—an outburst of feeling suggested, surely not created, by the flitting figures at the fair. The monologue, though spoken to the man's wife, and though often argumentative, is in truth meditative; and it is the meditation of a man who has the liveliness to feel Bohemian charms—the effervescence of spirit or of sense "frenetic to be free"—who has the capacity, denied alike to puritan and libertine, to see in life more ways than one, and yet the strong good sense to know that law is better than lawlessness, and the seemingly restricted sphere more fruitful than the search through space.

" Each step aside just proves divergency in vain.
The wanderer brings home no profit from his quest
Beyond the sad surmise that keeping house were best
Could life begin anew. His problem posed aright
Was—"From the given point evolve the infinite!"
Not—"Spend thyself in space, endeavouring to joint
Together, and so make infinite, point and point:
Fix into one Elvire a fair-ful of Fifines!"
Fifine, the foam-flake, she : Elvire, the sea's self, means
Capacity at need to shower how many such!
And yet we left her calm profundity, to clutch
Foam-flutter, bell on bell, that, bursting at a touch,
Blistered us for our pains. But wise, we want no more
O' the fickle element. Enough of foam and roar!
Landlocked we live and die henceforth : for here's the villa-door."

The key-note of the poem is struck by some couplets in the first act of Molière's *Don Juan*. Elvire, understanding neither his absence nor his excuses, addresses her husband:—"Vous plait-il, Don Juan, de nous éclaircir ces beaux mystères?" And before he, who is so volatile to Sganarelle, has stammered out a reply, she tells him that he can ill defend himself, that he should arm himself with a noble effrontery, and declare that in his sentiments towards her there is no change whatever. Now in Mr. Browning's poem the speaker has followed this advice. Armed with a noble effrontery—albeit he is anything but a mere reproduction of the *Don Juan* of the earlier dramatic poet—he plunges into the wide subject of the nature of man's love for woman and of his admiration for and liking of women; and in the diffuse *apologia* built up of countless illustrations, similes, subtleties, and ingenuities, he is sometimes all sophistry and sometimes all justice. Sometimes he deserves the *naïve* remark of Sganarelle: "Je ne sais que dire; car vous tournez les choses d'une manière qu'il semble que vous avez raison; et cependant il est vrai que vous ne l'avez pas," and sometimes, as in the passage already quoted, his conclusions are full of wisdom and virtue: so that on the whole he is a character unusually attractive for a great analyst to examine—for a great painter to depict. And here, in the one hundred and seventy pages of this book, is his heart exposed as on a dissecting table; and Mr. Browning, with his keen instrument in hand, points out what is morbid and what is healthy in his complex organization.

Would that his exposition were always lucid! Difficult it is, and perhaps must be, by reason of its subtlety; but surely there is here and there a wilful obscurity, which will restrict the book for the most part to the large but not yet enormous circle of Mr. Browning's warm admirers. Is it possible, some may ask, as they stand amazed at the difficulties of *Fifine at the Fair*, that the poet has written of purpose an enigma—to the Rosamund's bower of this labyrinth can they only reach who grasp the necessary thread? No, indeed; but it is probable that Mr. Browning, conscious that in our day most reading is careless reading, is not sorry to give men what they cannot read carelessly, and that sometimes in doing this—say in *Fifine*: not in *Balaustion*: not in *Hohenstiel*—he does much more than is needed to dispel the indolence which is the mode. Now and then he is wantonly obscure, and now and then he writes in a French idiom, not an English—talks of "white nights," for instance, instead of sleepless nights—he who has done so much in *The Ring and the Book* and in many another work (yes, in this very volume) to preserve or to recall the sturdy English banished from novel and newspaper.

Of the general mode of treatment followed in this poem, and of the poem's place amongst Mr. Browning's works, a little must here be said. As a poem for the most part of *intime* life and thought, with no more background, no more local colour, than the due presentation of character requires, it may be considered an analysis comparable chiefly with

the *Scènes de la Vie privée* of Balzac. In this way, it is related to *Any Wife to any Husband*, to *Dis Alter Visum*, and to *James Lee*. These indeed are but some important members of that family group of Mr. Browning's poems of which *Fifine* itself must now be accounted the head. But as an elaborated exposition of individual and peculiar character, the new book claims kinship with the "apologies" of *Bishop Blougram* and of *Prince Hohenstiel-Schwangau*, and it introduces us to a personage hardly less subtle and complex than these, though his part is played upon the Pornic shore instead of among the intellectual refinements and cavillings of theologians, or on the crater of a volcanic "society" requiring to be "saved."

In treating the subject that is broached and probed in *Fifine at the Fair*, most writers would have constructed a dialogue: the husband would have spoken first, and then the wife. But there is greater subtlety in Mr. Browning's method of making the husband frame for the wife her answers, retorts, objections, and embody these, together with his own discourse, in one long monologue; for it gives room for utterances from three points of view and types of character, instead of only two. The husband speaks in the main for himself; but at times he speaks for the wife as she would really speak, and at times he speaks for her as there could only speak the woman he *imagines* her to be.

Save in the prologue and epilogue, the book is written in couplets of twelve syllables to the line—spirited verse, often with the buoyancy and now and then with the directness of *Hervé Riel*, and, except for occasional roughness, not open to the conventional charges preferred against the versification of this poet. He also can jingle rhymes as well as another, though generally if one thinks of him with a great rhymer such as Victor Hugo, one thinks of him by way of contrast, as of one whose poetry contains the greatest quantity of thought with (often: not always) the least amount of splendour, while Victor Hugo's contains the greatest superficial splendour with the least possible amount of thought. With the one poet, manner is the chief thing: with the other, matter. And Browning at his best has in truth the terseness in fulness which is the special note and most unfailing sign of the great men in the greatest literatures—he has, when at his best, the pregnancy of Horace, Goethe, Balzac.

Of details, it may first be said that *Fifine at the Fair* contains two especially fine and suggestive illustrations, which should strike everyone—nor those the least who consider that work so substantial as the whole of this requires an often pondered judgment and the test of years. One is that parable of the householder's comparative regard for Rafael and for Doré: the other, the parable of the half hewn, half shapeless block in which only the sympathetic mind could trace the undreamt-of value of the work of Michel Agnolo. The laudation of the unfettered life of wandering gypsies—natural enough to most men in a mood that is fleeting—will remind at once of *Waring* and of "the wild joy of living," sung so splendidly in *Saul*. The portrait of Fifine herself—to mention another detail, and to end with it—is in the face delicate and strongly individual, and in the attitude vivid and bold.

" . . . Either ear is cut
Thin as a dusk-leaved rose carved from a cocoa nut.
And then, her neck! Now, grant you had the power to deck,
Just as your fancy pleased, the bistro-length of neck,
Could lay, to shine against its shade, a moonlike row
Of pearl, each round and white as bubble, Cupids blow
Big out of mothers' milk,—what pearl moon would surpass
That string of mock-turquoise, those almandines of glass,
Where girlhood terminates? For with breasts' birth commence
The boy, and page costume, till pink and impudence
End admirably all: complete, the creature trips
Our way now, brings sunshine upon her spangled hips,

As here she fronts us full, with pose half frank, half fierce;
No other than Fifine
Points toe, imposes haunch, and pleads with tambourine."

The portrait is completed, and in a sense exalted, elsewhere in the book, by the description of that occasional scorn with which Fifine surveys the crowd that admires her.

" Know all of me outside: the rest be emptiness
For such as you
I'm just my instrument: sound hollow: mere smooth skin
Stretched o'er gilt framework, I: rub-dub, nought else within—
Always for such as you!—if I have use elsewhere—
If certain bells, now mute, can jingle—need you care?"

FREDERICK WEDMORE.

Notes sur l'Angleterre. Par H. Taine. Paris: Hachette.
Notes on England. By H. Taine. Translated by M. F. Rae.
Strahan and Co.

M. TAINES Notes (the result of visits made to England in the years 1861–62 and 1871), together with the able contributions of M. Esquiroz to the *Revue des deux Mondes*, will have the effect of establishing the long controverted fact that it is possible for a Frenchman to write of England without falling into a series of grotesque misrepresentations in regard to what concerns our social life and domestic habits. One of the leading French philosophers has come over with the intention of studying us, and the wish to like us, and if he has failed in the latter, it is owing to differences of idiosyncrasy between his nation and ours, the development of which is the chief object of his book. Moreover, on reading his opening pages descriptive of the meteorological caprices of London, we feel that we can hardly overestimate the objective spirit which is, on the whole, so commendable in this work. What indeed must be the feelings of a foreigner who awakes one morning to find darkness not only visible but tangible, in a hideous yellow fog clinging to the face of London, and in the author's own words we give his assurance that his tenacity of life was put to the test by his first experience of a rainy Sunday in it:—"Un dimanche à Londres par la pluie: boutiques fermées, rues presque vides; c'est l'aspect d'un cimetière immense et décent. Les rares passants, sous leur parapluie, dans le désert des squares et des rues, ont l'air d'ombres inquiètes qui reviennent; cela est horrible. Je n'avais pas l'idée d'un pareil spectacle, et l'on dit qu'il est fréquent à Londres. Petite pluie fine serrée, impitoyable; à la voir, il n'y a pas de raison pour qu'elle ne dure pas jusqu'à la fin des siècles; les pieds clapotent, il y a de l'eau partout, de l'eau sale, imprégnée d'une odeur de sueur. Dans le Strand surtout, et dans le reste de la Cité, après une heure de marche, on a le spleen, on conçoit le suicide." It is easy to conceive what, under these depressing circumstances, must be the effect produced by our mean and irregular street architecture—irregular in a fashion which can only be rendered tolerable by the beauty of colour so conspicuous for its absence. And, in realising the general sense of ugliness and discomfort which must have weighed him down, we may pardon M. Taine for pointing out Somerset House as a mark for particular reprobation, and the Wellington "Achilles" in the Park, which, seeing that it is a copy of an antique "Slave holding Horses," in the Capitol at Rome, is hardly a fair example of British aesthetic depravity.

In the Parks, and in the fashionable houses open to him during the season, he made careful studies of the different specimens of mankind to be found there. Nor does he confine his selection of types to both sexes in the upper classes of society. Ladies of fashion, women-servants, M.P.'s, country squires, clergymen, guardsmen, footmen, are all equally brought under contribution—classes dif-

fering from one another in most respects, but made kin by three touches of British nature, viz.: the consumption of hetacombs of tasteless meat and watery vegetables, the preference for the strongest of liquids, and an insensibility to the caloric properties of pickles. Notwithstanding, he favours the continental impression that these ogres as a rule make excellent husbands and wives. The praise he freely bestows on the beauty of our women, he modifies in the epigram, "La laideur est plus laide que chez nous." He seems to have been unfortunate in the frequent intrusion upon his vision of the original of the conventional French caricature "l'Anglaise pour rire"—the gaunt middle-aged bespectacled female, who is clothed, but not dressed, and is remarkable for the prominence of her teeth; the prevalence of which latter peculiarity causing him to wonder whether it may not be connected with our carnivorous habits, a solution so ingenious that we are quite ashamed to spoil it by the prosaic suggestion that it is probably owing to the narrowness of our jaws. At the other extreme, we have the coarse red-faced type of Englishwoman—the "female Bull," who so distressed the sensibilities of Nathaniel Hawthorne. Taking the English and French woman at their best, he is unable to refrain from summing up the contrast by comparing the former to a comely, tasteless, rosy peach, and the latter to a strawberry fragrant with perfume and delicious to the taste. With regard to the English "Miss," she comes in for the regulation amount of enthusiasm and poetry with which she is traditionally invested in the minds of his countrymen; but, on the whole, it is not in dealing with types that M. Taine is furthest from M. Assolant.

Like his illustrious countryman Montalembert, he wanders through our public schools and universities with feelings of generous envy and wondering admiration. In contrast to the unhappy overworked French scholars, deprived of a vestige of independence, pursuing their studies between four walls in a crowded street, or for diversion walking out in strings of two abreast, there was something idyllic to him in the boys whom he met in straw hats wandering about the country in the neighbourhood of Harrow, or observed reading astride on the bannisters; and in attempting to do justice to the glories of Oxford he is evidently under the pressure of feelings which find a weak vehicle in words. At the same time it has not escaped him that our system of training, although admirably adapted for forming the character of youth, leaves the intellectual side comparatively untouched.

And although the child is father of the man, and the mind of an ordinary Englishman may be felicitously compared, as it is by him, to Murray's handbook, full of facts but without ideas, we must correct the libellous inference that the minds of our schoolboys are store-houses of facts. The personal independence and impatience of all but moral restraint which permeates our educational system he greets again under a new form in the *sans-gêne* of the House of Commons, in spite of its informality unquestionably the most dignified representative assembly in the world; for which advantage it is probably largely indebted to the position occupied by the Speaker, who is certainly a fortunate contrast to the President of the French Chamber, stamping his foot and ringing his bell, like the usher of a school trying to keep a set of unruly boys in order.

In short, speaking broadly, he sees nothing but what is most praiseworthy in all that regards the practical side of our national life; while he is unqualified in his disapproval of all that concerns our taste, and especially in the remarks on our aesthetics provoked by visits to the National Gallery, Kensington Museum, and International

Exhibition, is he obviously uncompromising in the antithesis. It is evident that he can get up no rhapsodies over our Lelys, and Knellers, or even over our Reynoldses and Gainsboroughs; while he hints that taking our school of art as a whole, we have never reached the level attained by Ingres or (Heaven save the mark!) by David. Moreover, it is difficult to acquit him of a deliberate intention in quoting as examples of Turner's style no works of his which were executed before his genius burst all bonds, and rioted at last to such excess that in the straining after effect the intention disappeared in the effort, and what was never meant to be realistic ceased to be even suggestive. In our pictures, as in everything else about us, our critic finds the practical element obtrusive; for is not the entire attention of our painters concentrated on the psychological aspects of humanity, until we have arrived at the pitch of endowing even our portraits of dogs with the expression of a human soul? Poems, the fitting medium for which should be the pen, not the brush, crowd the walls of our exhibitions. The philosopher, the student of human nature, sets his seal on our canvasses, but, in our anxiety to "point a moral and adorn a tale," where is Beauty to whom Art should be but the handmaiden? The poet is there—the skilful workman, but where is the artist? He intimates that, in our dislike to the merely sensuous, we seem to him to have fallen into the positively repellent. At the same time he is incorrect in treating pre-Raphaelism as an indication of the national taste, instead of as a very partial reaction from it, and we can assure him that there are many on this side of the water who, like himself, are unable to recognise anything but a defamation of nature in representations of scarlet poppies stuck at intervals in apple-green turf; apple-green graveyards in which each separate blade of grass is shaped, and shines like a penknife; rasping sunsets which might be intended for fireworks; and similar atrocities which result from the attempt to paint nature as she is, instead of as she looks.

As we have nearly done with M. Taine, we make haste to sum up his general experiences. He was fortunate enough, when leaving England last year, to fall in with a friend who, like him, had been studying ourselves, with whom he compared notes, which resolved themselves into a comparison of the forms of civilisation in England and France. "Laquelle vaut le mieux?" They are of one mind in giving to England the superiority of political constitution, which is stable, and not in danger of being unmade and badly remade every twenty years; in the material advantages which they attribute to the established form of belief—inculcating self-control and the culture of the will; in the greatness of capital accumulated in the country, together with our superior physical resources. On the other hand, France is vindicated by her climate; by the distribution of wealth which gives to none a large share, and yet enough to all; while her home life and social gatherings are characterized by greater intimacy, more politeness, more of the elements of real enjoyment than in England. They hold that these points tend to render "l'Anglais plus fort, le Français plus heureux." Evidently to M. Taine, France is a lovely and charming coquette—wilful, distracting, but whom, in spite of her faults, it is impossible not to adore, while England is personified in his eyes by the worthy sensible type of womanhood for whom it is difficult to feel anything but the greatest possible esteem. He is at great pains to impress his appreciation of the more solid qualities which claim his regard, and those who take umbrage at his opinion that our food and our women are equally insipid and ill-dressed, may console themselves by thinking that, when he was among us last year, there were other points of contrast between the two sides of the Channel.

FRANCES MARY CHARLTON.

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THE PARIS SALON, 1872.

[SECOND ARTICLE.]

IT shows the break-up of traditions in French art that work like that of M. Carolus Duran should receive respectful treatment at the hands of official criticism in the *Revue des deux Mondes*. M. Duvergier de Hauranne is the critic ; and he is scarcely at all scandalised ; yet M. Duran's two portraits might scandalise much less conservative instincts than those to which the *Revue des deux Mondes* usually gives expression. They are the extreme negation of everything like correct canons or discreet instincts in art ; they have more than all, the crying colour, the vulgarities and violences, which used to be supposed the peculiar appanage of our own school. One lady is red-headed and stout, and sits in an iron-grey dress on a sofa of purplish maroon, flourishing a scarlet fan ; the carpet being light green, and the background light greenish blue. The other stands up, in attire and surroundings equally full of gorgeous display and contrast ; there is an indescribable, almost a revolting, coarseness in both ; but yet the execution has a showy brilliancy as well as a real mastery which seems to silence remonstrance, and makes these the two most applauded things of the exhibition. Next after them, the portrait of M. Thiers by M^{me} Nélie Jacquemart is looked at, but is not good ; it has a certain emptiness and pomposity, as if the painter had been thinking more about the sitter's office than about his character, which suit ill with such a vivacious *bourgeois* countenance ; the same lady has done better in previous years. There is a very good level of refined portrait-painting, both of male and female subjects, maintained in the work of M. Delaunay, M. Lefebvre, M. Liévin de Wynne, M. Saint-Pierre ; while M. Ricard, without loss of his old sense of dignity and likeness, gets greener than ever in colour, and seems generally weakening ; and M. Hébert sends from Rome a lamentably vaporous and insubstantial "Marquise," betraying, we would say, ill-health as well as the effort at over-spirituality. M. Baudry, of the Institute, quits his occupation of decorator to the new Opera to send a small portrait of M. Edmond About, executed with almost the wiry minuteness of enamel, but very living in expression and likeness ; the sitter is in travelling furs and cap, relieved against a blue ground. Two portraits not as much noticed as they deserve, because they are entirely without routine attractiveness, are those painted by M. Gaillard, the engraver ; one of them in particular, the ugly head of a shrewd middle-aged woman of house-keeper type, is a marvel of precise and patient realism and a fine example of draughtsmanship. M. Jalabert and M. Giacomotti are both remarked for portraits of precisely the opposite kind—more or less flattered ideals of graceful costume and coquetry. M. Jalabert in particular has probably never done so well as in this head of M^{me} Canrobert, with its pleasant tones of grey and pearl.

Next after the most conspicuous of the portraits above named, or on a level with them, the pictures bearing upon late events have attracted the popular pressure. Few of these are good ; one of the best was M. Détailles' "Prussian Baggage-train in the Snow," with a great deal of clever expression in its personages, and a singular directness and ready impromptu of execution ; but this has been warned off the gallery walls in deference to German sensibilities. There remain the two illustrations of the Metz campaign and its disasters, furnished by M. Protas ; the "Coup de Canon," by M. Berne-Bellecour ; the "Défense de St.-Quentin," of M. Armand-Dumaresq ; "The Wounded Bugler at Reichshoffen," by M. J. L. Brown. Of these artists, M. Protas has been long known for his mechanical trick of drawing and grouping French infantry soldiers to order ; those of this year are neither better nor worse drawn and grouped than usual ; the distant masses being generally disposed with considerable skill and effect, the nearer individual figures having the quality of wood, and being in this case still further spoilt by an ill-conceived tragedy and over-done sentimentalism. In another way, M. Armand Dumaresq's picture is broken up, vulgar, and bad ; the white charger and rider of M. Brown have a certain undeniable vigour and daring, but it is too horrible a cynicism which thus covers everything with spouted blood, and seizes the moment of sudden and maddest agony in man and beast. Another war picture, called "L'Oublié"—a wounded mobile left to freeze, and struggling for the last time to lift himself against the weight of his knapsack—has the same quality of cold painfulness and

intolerable horror. M. de Bellecour does best by far with his battery interior ; there is a precise simplicity and a somewhat bald lifelikeness in the gunners' figures which suggest photography ; indeed the picture looks like a composition very carefully compiled upon the data of a class of photographs which have been common enough. It is done with a quiet firmness of idea and execution, and an excellent tone and gradation in the landscape.

In the landscapes of the year there are some notable decadences. It is some time since M. Cabat, of the Institute, has abandoned nature and study, in his scenes of wild Breton country and Druidic forests, for a fictitious or at least artificial grandiosity ; and his "Stormy Weather" and "Druid Fountain" of 1872 are examples which show the fiction or artifice growing more and more confirmed. Quite as dignified in reality, and infinitely more sincere and unpretending, are the two large landscapes (also from Brittany) which M. Camille Bernier sends under the title of "January" and "August" ; the latter, indeed, with its solidly and candidly painted range of farm-buildings and timber stack amid great trees, is perhaps the capital landscape of the exhibition. M. Daubigny seems disposed to rest on his laurels, or to trust to those which his son may be on the path to earn ; his picture of a cooper at work, and of the windmills of Dordrecht, are black, hard, and empty in comparison with his best work ; while the "Fishers' Return" of the younger (Karl Pierre) Daubigny is little more than a sketch, although a powerful one, in imitation of his father's large impressive manner. Corot, again, is not himself ; his view near his house at Ville d'Avray, and another near Arras, are both of them exaggerations of his exquisite specialty—the foliage too systematically flaky, the high lights too regularly dispersed, the cool grey tones and pleasant sylvan composition carrying too much the sense of the studio and of convention. And what is worse is that M. Corot has to see himself caricatured by imitators, who find the surface aspect of his work, and effects of his predilection, easy to catch ; of these M. Caillou is one of the most to be deprecated. M. Chintreuil, on the other hand, is a pupil of Corot, yet anything but a slavish one ; his large landscape, with a moist spring haze dimming and mystifying the scale and outline of everything, and an avenue of orchard trees in blossom and dripping in the soft weather, is one of the most promising in the gallery. Were it not that M. Émile Breton had done much the same sort of thing often before, one would say that his "Winter Morning" and "Winter Evening" deserve very great credit ; the former of them, at least, is an admirable piece of snow effect—a stream, a cottage, tall willows, having each spray thick with snow, brambles and bushes marked with it, the sky threatening still more, and though its colour is white, showing somehow lurid and opaque against the stronger white of the earth and trees. For good landscapes with animals, one may note the Breton moors and horses of M. Théodore Valérios, the wilder and remoter traveller's picture of M. Tournemine, showing with much power and spirit a fight between an African elephant and lion.

SIDNEY COLVIN.

NOTES.

Neither French nor German art-periodicals for the current fortnight offer much news of interest. An article of Franz Hottner in the *Zeitschrift für bildende Kunst* pronounces Kundmann's monument to Schubert (formally inaugurated at the end of May) a successful solution of that difficult artistic problem.—The continuation of Bode's valuable papers on the painters of Haarlem deals with the Ruisdael family, and is illustrated by two powerful etchings of the chief of the name ; one from the hand of Unger, the other from that of L. Fischer.—In the *Gazette des Beaux-Arts*, M. Beulé continues his notes of the Athenian excavations, which will by and by form an entertaining supplement to the well-known *Acropole d'Athènes*.—The two most important critical notices of the Salon (apart from the feuilletons of the daily papers) are by M. Paul Mantz in the *Gazette des Beaux-Arts*, and by M. Duvergier de Hauranne in the *Revue des deux Mondes*.

Cav. Gennaro Vigo has discovered a copy of the *Annals of Matteo Spinelli da Giovenazzo*, which settles the controversy respecting their genuineness, and secures to Naples the credit of having produced the first historian of Italy who wrote in Italian.

New Publications.

- AUS MOSCHELES' LEBEN. Nach Briefen u. Tagebüchern hrsg. v. seiner Frau. Leipzig: Duncker u. Humblot.
- DE TOCQUEVILLE, Alexis, Correspondence and Conversations of, with Nassau W. Senior. From 1834 to 1859. Ed. by M. C. M. Simpson. 2 vols. King.
- GRILLFARZER'S Sämmtliche Werke. Band 1, 2. Cotta.
- HOFMANN, R. Die Gemälde-Sammlung d. grossherzogl. Museums zu Darmstadt. Darmstadt: Diehl.
- KRAUS, F. X. Das Spottcrucifix vom Palatin u. e. neu entdecktes Graffito. Freiburg i. B.: Herder.
- KUGLER, F. Geschichte der Baukunst. 5. Bd. Geschichte der deutschen Renaissance. Von W. Lübke. Stuttgart: Ebner u. Seubert.
- MOLIÈRE. Eine Ergänzung der Biographie des Dichters aus seinen Werken. Paul Lindau. Leipzig: J. A. Barth.
- PLATH, J. H. Confucius u. seine Schüler. Leben u. Lehren. II. Leben. München: Franz.
- SEEMANN, Th. Die Genremalerei, ihre Aufgabe u. Begrenzung. Dresden: Adlers Bchhg. (Huhle).

Theology.*KALISCH ON LEVITICUS.*

A Historical and Critical Commentary on the Old Testament. With a New Translation. By M. M. Kalisch, Phil. Doc., M.A. *Leviticus*. Longmans. Part I., 1867; Part II., 1872.

It is a remarkable coincidence, which creates some slight presumption in favour of their common hypothesis, that the sixth part of Bishop Colenso on the Pentateuch, and the second of Dr. Kalisch on Leviticus, should have appeared almost simultaneously. The former work is the more comprehensive of the two, and its consideration may therefore be postponed. The latter forms part of a commentary the first volume of which, on Exodus, appeared in 1855, and was conservative in tendency; the second, on Genesis, in 1858, and was distinctly critical in spirit; the third, on the first part of Leviticus, in 1867; and the fourth, completing that book, in the present year. It is singular that so fruitful a writer should have met with such slight recognition from English students. Even Mr. F. C. Cook and his conscientious fellow-workers seldom mention his name. The only exception, so far as we know, among native authors, is the learned Scotch Roman Catholic, Dr. W. Smith, though the fragmentary examination which he bestows (*Book of Moses*, &c. vol. i. pp. 504-516) entirely fails to do justice to the cumulative argument of Dr. Kalisch. This strange neglect of an eminent scholar cannot be accidental, and it may facilitate our task if we premise a few remarks on the causes which have combined to produce this result.

The first which occurs to us is the un-English cast of Dr. Kalisch's style; a venial fault, which must not prevent us from recognising the remarkable degree in which he has mastered the difficulties of our language. The next is his excessive accumulation of details, a defect which borders so closely on a virtue that we can only regret its deterrent influence on readers. The third is of more importance, because it threatens to postpone indefinitely a fair consideration of the author's opinions. We refer to his growing theological dogmatism, and particularly to some inconsiderate controversial effusions in the first part of his work. Let no one misunderstand us. We are not pleading for any evasion of the difficulties involved in the traditional theology. We simply ask that the historical investigation of the Scriptures may be kept distinct from a criticism of their contents entirely based on modern scientific theories. And this on three grounds: first, that the necessary gifts for such different kinds of criticism are seldom found united in the same person; secondly, that many Biblical students are accessible to a historical argument, but object to a rough

and ready inference from the impossibility of miracles and predictions; and, thirdly, that an internecine war between modern criticism and the religious views of the majority is highly prejudicial to the interests of general culture. A special reason for the slight success of his *Leviticus* may be the author's unwise assumption of originality. He appears to ignore the fact that the hypothesis which he so ably maintains is the common property of a small but influential band of recent critics.

It is now ten years since a learned Jewish scholar, Dr. Julius Popper, made a strictly scientific attempt* to show that the account of the construction of the tabernacle in Exod. xxxv.-xl., and that of the consecration of Aaron and his sons in Lev. viii.-x., received their present form long after the Babylonian exile; in other words, that the supposed earliest of the Pentateuch records, so far from being homogeneous, has been retouched and added to on more than one occasion. Whether from the severity of its style, or the obscurity of its author (although it was reviewed favourably by no less a critic than Dr. Geiger), this important work seems to have fallen almost dead on the learned world. But its leading idea could not long be ignored. It represented a natural reaction against the subjective method of previous critics. It also supplied, or professed to supply, a firm historical starting-point for further researches. Accordingly in 1866, Dr. K. H. Graf, influenced perhaps by the teaching of his countryman, Professor Reuss, of Strassburg, revived the old theory of the post-exile origin of the sacerdotal legislation. But his work,† small as it is in extent, was far from being a feeble echo of Vatke and George. Its ability has not yet perhaps been sufficiently recognised, but some of its effects are already visible in the avowed adoption of similar views upon Leviticus, &c. by such able critics as Lagarde, Merx, Kuenen,‡ and, we may now add, Colenso. These particulars are not only important bibliographically. They prove the existence of a powerful current of critical opinion. And without detracting from that independence which the author so justly prizes, we think that a simple mention of these facts would have increased the tenability of his position.

But our readers will be impatient for a few particulars concerning the second part, which has lately appeared. They will perhaps recollect that Dr. Kalisch, in his first volume, began to analyse Leviticus into a number of sections or codes "written, enlarged, and modified by different authors," all of them later than the Deuteronomist, "in harmony with the necessities and altered conditions of their respective times." (Part i. p. xx.) This view is carried out at much greater length in the second volume, which deals with the remainder of the book of Leviticus, beginning at chap. xi. On comparing the laws of purity and diet, the sabbath and the festivals, the sabbatical year and the jubilee with the parallel passages of Deuteronomy, Dr. Kalisch discovers that the regulations of Leviticus presuppose such an advance in hierarchical organization, and in moral and spiritual culture, as would alone be sufficient to indicate a more recent origin. Another parallel is drawn between certain passages of Leviticus and the prophecy of Ezekiel. The directions relating to the priests, the sacrifices, and the festivals, framed by the latter for his ideal state (Ezek. xliv.-xlvi.), are found to be "greatly at variance with those of Leviticus," from which it is inferred that "the book of Leviticus did not exist, or had at least no divine

* *Der biblische Bericht über die Stiftskirche* (Leipzig, 1862).

† *Die geschichtlichen Bücher des Alten Testaments* (Leipzig, 1866).

‡ It is strange that Dr. Kalisch only refers to an incomplete French translation of Kuenen's *Onderzoek*. The matured opinions of the latter must be sought in *De Godsdienst van Israel* (twee deelen; Haarlem, 1869, 1870).

authority, in the earlier years of the Babylonian captivity." Passing on to Lev. xxvi. 3-46 (which Bleek himself admits to be much later than Moses), Dr. Kalisch finds the destruction of the Jewish state and the misery of the exiles so vividly described that this section can only have been written at "an advanced period of the Babylonian rule." Another step is gained by investigating the laws relative to the sin-offerings and the high-priesthood, the day of atonement and the year of jubilee, "the existence or full development of which cannot be proved until long after the captivity." The day of atonement, with which the year of jubilee was associated, was unknown, according to Dr. Kalisch, in the time of Nehemiah, "and we shall probably be near the truth if, considering the spirit of the concluding chapter on votive offerings and tithes, we place the final revision of Leviticus and of the Pentateuch at about B.C. 400." (Part ii. pp. 637-639.)

There is little that is peculiar to the author in the process by which he arrives at this conclusion. We still desire a shorter and clearer view of the argument, such as would be supplied by a translation of Graf's *Die geschichtlichen Bücher* or the second volume of Kuenen's *Godsdiest*. It is evident, however, that Dr. Kalisch has been influenced by contemporary criticism in a much less degree than Bishop Colenso, and his mode of expressing an argument is by no means devoid of originality. We select the following as a favourable specimen; it is taken from a most interesting essay on the day of atonement:—

"But simultaneously with the historical, the inward and spiritual expansion of the Hebrew festivals was worked out. This expansion was the fruit of that growing conviction of the sinfulness of man, and of his need of expiation before a holy and perfect God, which is the main attribute of pious frame of mind, and which, if manifested with earnestness and purity of purpose, invariably indicates the last and highest stage of religious life. We have on previous occasions attempted to describe this feeling of moral dependence and self-humiliation, as evinced in the Hebrew Scriptures, and especially in the Pentateuch; it was naturally fostered and strengthened by the misfortunes and struggles of the exile, which the guilty and remorseful conscience of the nation readily attributed to past iniquities; and it gave rise to the *sin-offerings*, the latest development of the noblest class of sacrifices, those of expiation. As these grew in depth and popularity, they were associated with all festive and solemn days, and were superadded to the older holocausts and thank-offerings. They could not, before the Babylonian exile, have been invested with the minute ceremonials and the subtle gradations specified in Leviticus, as we have before proved; in the first temple, they could not have been presented in the manner described by the Levitical legislator, because that temple had no curtain against which the blood could be sprinkled; in fact, they attained their highest and final form only during the time of Zerubbabel's temple. And the crowning stone of that religious edifice, which demanded the incessant labour of more than a thousand years, was the day of atonement as instituted in Leviticus. It combined, as in one focus, all the scattered rays of spiritualism, which in successive periods had helped to dispel superstition and frivolity; and it kindled a flame of devotion which, if rightly directed, might well cleanse the heart from egotism and pride, and raise the mind from worldliness to a yearning after light and truth."

"Thus the vast circle was completed: the festivals of the Hebrews, like nearly all their institutions, had passed through three distinct phases—the natural or cosmic, the historical or commemorative, and the ethical or spiritual—and they were by this process more and more enlarged, enriched, and refined." (Part ii. pp. 276, 277.)

It is not surprising that speculations like these should have met with a vehement opposition not only from the "orthodox" but even from many disinterested critics. The former were not unnaturally startled (*a*) at the supposition of "fraud" in a system of such high authority; the latter at (*b*) the bold originality of conception ascribed to the Levitical legislators, which contrasted, according to them, with the otherwise unproductive character of the age of Ezra, and (*c*) the sudden extinction of the freer and more childlike views of religion inculcated by the prophets. And both, perhaps, were influenced to some extent by (*a*) the

apparent improbability that a system of modern origin should be accepted by the nation as the code observed by their ancestors. These are serious objections, and deserve a more detailed discussion than we are allowed to give. But with regard to (*a*), it is not out of place to refer to that distinction between the divine and the human element in the Scriptures which is accepted by all *modern* Protestant writers on inspiration as "the very basis of their reasoning." (See Dr. Hannah's *Bampton Lectures*, 1863, p. 256, note 3.) From such a point of view it is not *a priori* improbable that a disproportion between the religious and the moral standard should be traceable even in the work of an inspired writer, like Leviticus. If we further admit, as all moderate students of the Hebrew Bible are beginning to do, the claims of literary criticism, the occurrence of "pious frauds," as they are called, in the Old Testament is raised to a positive certainty. It may be questioned, however, whether "fraud" is quite the right word for these phenomena. It is possible, as many facts noticed by Geiger tend to show, that Ezra and his successors invested revelation with a sort of "germinant" character, that is, that they regarded their religious books not as historical records, but as forms of truth with an indefinite capacity of expansion. Hence, perhaps, we may account for the reconstruction of Jewish history in Chronicles, and the reorganization of the established religion in the middle books of the Pentateuch. With regard to (*b*), we need only ask, what evidence is there for the unproductive character ascribed to this period? Prophetic inspiration, indeed, was on the wane, and finally died out altogether, but the later portion of the Hagiographa is sufficient to redeem the credit of that silver age. To objection (*c*), two forms of answer may be given. We may either follow Dr. Kuenen (*Godsdiest*, ii. 142-146), and infer from Neh. xiii., compared with Malachi on the one hand and Ruth and Jonah on the other, that an influential party was opposed to the Levitical innovations; or we may point out, with Dr. Kalisch in the passage quoted above, that the national religion had passed into a new phase, and had gained in depth what it had lost in childlike simplicity. The last objection (*d*) loses much of its force when we consider the importance of the priestly element in the post-exile period, and the facility with which new laws could be imposed, under the garb of antiquity, on those who had grown up in ignorance of the past. And whether probable or not, a minute interference with the text of the Pentateuch is not obscurely indicated by the curious legend of Ezra reproducing the law from memory by divine assistance. It is true that our earliest authority (4 Esdras xiv. 21, 22, 37-42) is later than the Christian era, but this very circumstance confirms the antiquity of the legend. The success of Ezra's innovations, and the general recognition of the Pentateuch as the law of Moses, would naturally obscure the tradition, so far as this seemed to detract from the credit of the latter. And the supernatural circumstances of the story were only too congenial to the growing superstition of the age.

But whatever view be taken of the author's conclusions, there can be no two opinions as to the value of his method. He is not one of those who pretend to discover secrets by a faculty of divination. He lays no undue stress on the analysis of style, nor on the argument *a silentio*, remembering that the facts revealed by the former are susceptible of various explanations, and that the absence of testimonies to the existence of a law is not decisive of its non-existence. His method is, in a word, to proceed from the known to the unknown. We cannot, however, help regretting that he has left one side of his question untouched. It is well known that Graf, followed in part by Colenso, draws a broad line

between most of the narratives in the "Fundamental Record" and the sacerdotal legislative portions; Kuenen, on the other hand, maintains in a certain sense the unity of the Record, and at the same time its post-exile origin. The subject is important, and we should have been glad of more light from Dr. Kalisch. As for the Levitical legislation, we know that, whether framed after the exile or not, it only attained canonical authority in the Persian period. To a great part of the nation it had therefore been practically non-existent. But to the date of the primary Elohistic narratives no one can plead indifference, for upon it depends, to some extent, the possibility of retracing the outlines of Israelitish history.

And here we part from the author for the present. His results are for the most part so new to English students, and so liable to misapprehension, that we feared to distract the reader's attention by critical digressions. The illustrative sections of the work, especially those on the day of atonement, the sabbatical year, and the year of jubilee, are a pure gain to Biblical science. The philological notes are careful and erudite, and provoke fewer objections on the score of tact than the corresponding sections of *Genesis*. We hope to return to the purely critical portion in reviewing the sixth part of Bishop Colenso.

T. K. CHEYNE.

Explanation of the Old Testament. [Beiträge zur Erklärung des Alten Testaments, enthaltend elf Abhandlungen, exegetisch, kritisch und historisch behandelt von Laur. Reinke. Achter Band.] Giessen : Roth.

As contributions to the study of the Scriptures, this work has two distinctive features entitling it to notice. It is true that it appears at least thirty years too late to exert any influence on the current of critical opinion. Controversy has passed into a new phase, with which, in spite of one or two references to Graf, Dr. Reinke is evidently not familiar. But as a tacit protest (the more valuable as coming from a Roman Catholic) against the *odium theologicum*, and as a specimen of true scholarly work in a modest but very necessary sphere, we can conscientiously recommend the book. Omitting the dissertations on the Sabbath, on Gen. i. 1, on the Cherubim, on the history of Manasseh, on the "Book of the Law" found under king Josiah, on the standing still of the sun and the moon, on Prov. xxiv. 16, and on Melchizedek, the reader may consult with profit the fourth, "On the pretended alteration of the Masoretic text, Isa. xix. 18," in which Dr. Reinke maintains the received reading, and renders "City of destruction" (of idolatry); the seventh, "On the causes of the difference of the ancient interpretations of Isa. xvi. 1, Ps. xcii. 6, and cx. 3;" and the eighth, "On the variations of the ancient versions in some other passages of the Psalms." Dr. Reinke opposes the view of Geiger, which has been gaining ground among some Protestant critics, that the Masoretic text has undergone deliberate falsification. Without any pretence of brilliant discoveries, he has performed a useful work in restoring the readings or misreadings of the Hebrew exhibited by the versions. We will only regret that he has not paid more attention to Hebrew palaeography, as a means of accounting for the growth of various readings.

T. K. CHEYNE.

St. Thomas of Aquin: His Life and Labours. By the Very Rev. Roger Bede Vaughan, O.S.B. Two Volumes. Hereford : Hull, late Head, 1871-1872.

THE controversy on the Origins of Christianity shows signs of being exhausted if not decided soon, for the same limitations in the materials which prevent the contest from coming to an issue will at last prevent its going on at all. When

this point is reached, if not sooner, criticism will be forced to return to an examination of the contents of theology as it appears at its full development. As there is more than one point of view in which orthodox theology may be said to culminate in the great constructive movement of the thirteenth century, we are inclined to welcome any introduction to this period, and to its great central monument, the *Summa Theologiae*. For it cannot be denied that an introduction was wanted, at least in England, when the great English historian of Latin Christianity frankly confesses that he had never once read the masterpiece of Latin theology through. His sketch of the subject is not unworthy of it; but, as might be expected, he does not avoid serious misrepresentation of the Angelic doctor. Dr. Vaughan's book is written with two objects: it is intended both to present a picture of the saint and to serve as an introduction to his works. For the latter purpose the book is provisionally useful, and we congratulate the writer on this qualified success: his work ought really to be tried by the standard of a fifteenth-century edition of a classic, and tried by this standard it is really creditable; though the plan is decidedly better than the execution. There is no other book in English to which the reader could be referred for a conspectus of the speculative movement of the twelfth century, of the text-books in use, and the like, or again of the points at issue between the mendicants and the university. We do not think that Father Vaughan states the last question accurately; but at least he has the merit which Mr. Mill has recognised in Mitford's *History of Greece*: he puts his error into a shape in which it can be understood and discussed. The existence of monasticism was not at stake: what was really at stake was its influence and authority in the world. The expulsion of the regulars from Paris would have been an anticipation, not of the suppression of the monasteries, but of the suppression of the Jesuits, and even here the anticipation would be on a very small scale. This mistake prevents the writer from perceiving the strength of William of Saint Amour's case upon purely Catholic grounds. Perhaps the victory of the regulars may have postponed that revolt of the intelligence of Europe which began in the fifteenth century and was consummated in the eighteenth, but it certainly secularised the regulars themselves. Dr. Vaughan is happier in seizing the character of the revolt which was suppressed. No author has brought into such relief the strange combination of astonishing vigour and utter emptiness in Abelard, who is claimed, with reason, as a perfectly sincere though vain and presumptuous Catholic. In St. Bernard and Abelard the antithesis between monasticism and scholasticism reaches its climax; in St. Thomas the writer finds the synthesis of the two of which there had been a brilliant adumbration in the occasional writings of St. Anselm. This synthesis is the governing thought of the book, and the writer is carried away by it. In his enthusiasm he constantly allows himself to mistake insistence for development, and becomes tedious without ceasing to be incomplete. For instance, he devotes a great part of his second volume to the relation between St. Thomas and the doctors of the primitive Church. The comparison is perfectly relevant. St. Thomas stands in much closer relation to the fathers than a thinker like St. Anselm, or a thinker like Duns Scotus; but it is hardly the beginning of an explanation to assure us repeatedly that the monastic spirit was common to all. In fact, Dr. Vaughan is so inflated with the grandeur of his subject that he has written a book which, with some of the merits of a voyage of discovery, has all the pretensions of a monumental work. These are the more ungraceful for being combined with the *naïveté* of childlike fervour and the crudities of an able

man who has put off writing too long. It is unnecessary to add that the author sees nothing of the imperfections of the great works written when every book had to be a library; that he is never weary of vaunting "the Angelical's" super-human memory in spite of the fact that the industrious piety of the Venice editors continually fails to verify the references of the saint; that he has no eyes for the grotesque and arbitrary nature of the materials which made up the staple of the traditional thought of the middle ages; and that it never occurs to him that much which his hero laboured to defend was in itself purely accidental, and derived its only permanent value from the ideal reasons which he invented for its protection against the frivolous criticism of an inconsequent dialectic. When we have made these allowances, and all the allowances that can be demanded by a world which is old enough to have a right to be fastidious, the *Summa* will still remain one of the books which impress us most strongly with the wisdom of their author, in Joubert's sense of wisdom, "rest in light." Of course the greatness of such men as Spinoza or even Butler depends upon their method and their point of view; it is not to deprecate them to say that the matter of the *Sermons* and of the fourth and fifth book of the *Ethics* is continually contained and transcended in the *Prima Secundae*, but the statement may serve to give some measure of the intellectual range of Aquinas. He lived for his work, and he died in it; like Socrates, his concentration of thought was so intense as to pass into long trances, from which he had to be roused by shaking his *cappa* to recall him to sublunary things. As he grew older, the trances became longer, more frequent, more ecstatic; at last he could write no more: all that he had written seemed to him mere straw in comparison of that which had been shown: in one sense, he had broken down under his work; in another, he had risen above it. Dr. Vaughan's account of the closing scene is so beautiful as to make us regret that he has so often buried the human element of the life under a mist of second-hand panegyric, where translations from papal bulls and quotations from dull Tridentine doctors figure oddly enough between historical pictures after the Dean of Westminster and less infelicitous echoes of the least severe manner of Newman.

G. A. SIMCOX.

Intelligence.

It gives us much pleasure to notice that the vacancy caused at Tübingen by the death of Oehler has been filled up by the nomination of Prof. Diestel, of Jena.

A correspondent proposes to remove the obscurity of Ps. cxxxvii. 5, by giving בְּשָׁמָךְ the sense of שְׁמָךְ. He will find that he has been anticipated by Schlesinger in Cahen's French Bible, who renders "qu'elle s'engourdisse." The Targum would seem to have read בְּשָׁמָךְ, which is at any rate more defensible palaeographically than Dr. Weir's ingenious emendation in No. 49. נ and נ are easily confounded in the archaic Hebrew alphabet; cp. Jer. iii. 8, Ezek. xxiii. 13, Ruth iv. 4, Exod. xx. 24 (unless the Masoretic reading יְנַבֵּר is directed against the worship at the high places).

Dr. Geiger points out (*Jiid. Zeit.* 1872, pp. 133–136) that Prof. de Lagarde's conjecture in the *Academy* (vol. iii. p. 12) is really a development of some remarks by himself in the German Oriental *Zeitschrift*, 1867, p. 469, &c., and by Prof. Bickell in his *Conspectus of Syriac literature*. If however acrostics were really employed by psalmists, he remarks, we should certainly find them in the oldest liturgical passages of the Jews, whereas these are only distinguished by alphabets. Acrostics do not appear before the ninth century.

New Publications.

BAUMSTARK, C. E. Christliche Apologetik auf anthropologischer Grundlage. I. Band. Frankfurt a. M.

STRACK, Dr. Prolegomena critica in vetus Test. Hebraicum, quibus agitur (1) de codicibus et deperditis et adhuc extantibus, (2) de textu Bibliorum Hebraicorum qualis Talmudistarum temporibus fuerit. Fasc. primus. Leipzig.

Philosophy and Physical Science.

La Morale nella Filosofia Positiva. Studio critico di Giacomo Barzellotti, Professore di Filosofia nel R. Liceo Dante di Firenze.

S. BARZELLOTTI's title is likely to mislead English readers, as the "morale" of which he treats is not that of Comte, with which he does not seem to be familiar, but English utilitarianism, in connection with the empirical psychology which may be considered the reigning school of philosophical thought in our island. His choice of a title is partly due to the loose notion attached to the term "positivism" in Italy. Never was there a movement of ideas, our author informs us, more wanting in consciousness of its own tendency and in vigorous criticism. It is a school formed of the *débris* of old philosophies, under the strong but indefinite impulse of the general liberal movement of Italian society, in which Comte and Littré, Büchner and Moleschott, Mill, Bain, and Spencer, are quoted as concordant authorities. "Discordi in ogni cosa, fuorchè in negare ciò ch'essi chiamano teologia e scolastica (e la sognano dappertutto), quando si chiede loro chi affermino un'opinione, una dottrina qualunque, allora ci si rivelano inconsapevolmente materialisti, egheliani od empirici, tutto in una parola fuorchè positivisti consequenti." This confusion of methods (to which we could find a pretty close analogue in England, only that we do not usually call the motley result "positivism") S. Barzellotti has proposed to remedy by a careful study of the "English positivists," especially Messrs. Mill, Bain, and Spencer, who alone, he says, follow a path "che può condurre il positivismo a produrre quel più di cui è capace." This path is the application of the positive method to subjective psychology, which may be regarded as peculiarly English; for M. Taine, as S. Barzellotti says, may be considered to belong to the English school. "Mentre il Comte si sbarrava da sè la via maestra della scienza, l'osservazione subiettiva, e i Tedeschi per troppo trascenderla ne compromettavano i risultati più certi, e gli Italiani, intenti a ricostituirsi in nazione, non avevano la forza di mandare innanzi di concerto psicologia e metafisica, gli Inglesi accettavano dalla Francia la parola d'ordine della ricerca positiva, mà in omaggio a un'antica tradizione salvavano la psicologia dal naufragio delle dottrine filosofiche." We have then in the volume before us a careful study of this line of English thought, especially in its ethical development, by a critic at once hostile and favourable: hostile, as belonging to an opposite school, but favourable in so far that he is perpetually led to praise the English writers, in contrast to their continental analogues, for moderation, subtlety of analysis, and patient fidelity of observation.

Our author's reading in English philosophy has been considerable, and the general views and criticisms which he gives us are close and definite, and always instructive, even where they involve misapprehensions. Indeed, he seems to grasp more clearly and completely than most English antagonists the peculiar position of the Associationist psychology; and he describes the distinctions and mutual relations of the different writers with much subtlety and delicacy of apprehension. And for the not unfrequent errors in detail which I have to notice in his work, there are two kinds of excuse. Firstly, the disposition, at once excellence and defect of English philosophers, to sacrifice systematic coherence to fidelity of reflective observation, makes the historical study of them peculiarly complicated and perplexing; and, secondly, such a historical study is at present in the most rudimentary and imperfect condition among ourselves. We cannot perceive without some sense of shame that some of the most serious of S. Barzellotti's blunders may be traced to English writers of repute. To

Mr. Lecky, I think, he chiefly owes the most fundamental of all : the confusion of egoistic and universalistic hedonism under the common term of utilitarianism, which continually vitiates his historical *aperçus* and causes his criticism to miss the point. If anyone understands the ethical controversy that extends from Socrates to the present time as a dialogue between *two* schools of thought, "Intuitivist" and "Utilitarian," and so considers the difference between Epicurus, Hobbes, and Helvetius, on the one hand, and Bentham and Comte on the other, as quite secondary and subordinate, he misses the true clue for tracing the progress of moral thought generally, and is especially liable to misapprehension in following the complicated and varied portion of the controversy that has been carried on in England since Hobbes. The truth is that utilitarianism in the Benthamistic sense, the system which fixes as the right end of human action the "greatest happiness of the greatest number," does not originate (in England) with Hobbes, but with his antagonist Cumberland; and was for some time in friendly alliance with the intuitional method as represented by (*e.g.*) Clarke. Butler was the first to point out clearly the at least apparent discrepancy between Virtue (as commonly understood) and the general happiness. In Hume's hands, utilitarianism, presented as a mode of *explaining* morality, was felt to have a destructive tendency and fell under suspicion ; but it was not till Bentham that it was offered as a method for determining conduct, absolutely complete in itself, the conclusions of which were to overrule all traditional precepts and supersede all existing sentiments. Herein lies the originality of Bentham, which our author quite misses. Of this, perhaps the blame is partly due to Dumont (through whom Bentham is generally known on the continent), who, though an excellent populariser of the system in its political and social development, blunders sadly when he tries to expound its ethical principles. Again, S. Barzellotti's neglect of Shaftesbury, perhaps the most important of the different turning-points in the course of English ethical thought, may be referred to his study of Professor Bain's Ethical Systems. In regarding Locke (who held that ethics, by a steady contemplation of the relations of its fundamental notions, might and ought to become as perfect a science as geometry) as an adherent of "*l'Etica sperimentale*," he only endorses an almost universal error : but one is curious to ascertain how he comes to class Mackintosh with James Mill, and to say that ethical enquiry ". . . nello Stewart . . . si restringe al sentimento e perde di vista la ragione."

These latter mistakes, however, are unimportant, except as illustrating the difficulty of gaining at second-hand an accurate knowledge of the English moralists. But the whole work is pervaded with the misapprehension of Comte's relation to the English writers criticized, which the title indicates. This misapprehension is double, and in two opposite directions. On the one hand, S. Barzellotti overrates the amount which our school owes to the French thinker in respect of method. It is not that he is insufficiently acquainted with the lines of English thought before Comte with which the speculations of Mill, Bain, and Spencer, are naturally connected ; he himself points out and characterizes this connection, and admits that the English have a certain right to repudiate the title of being adherents of Comte. But he seems to refer to Comte the impulse which caused phenomenism (as for clearness' sake I prefer to call it) to pass from the purely critical attitude which it presents in Hume to the comprehensive construction at which it aims in Mill, Bain, and especially Spencer. Now it is impossible ever to estimate exactly the influence of any thinker on his contemporaries ; but it may safely be said that, if we ignored

Comte altogether, and considered the above-mentioned writers in relation to their English antecedents only, we should not find in them any unnatural and inexplicable originality. If we confine ourselves to empirical psychology, with which our author is especially concerned, we find that the most important step had been taken by James Mill and Brown ; all that their successors had to do was to advance further on lines of thought clearly marked out, with a more conscious and reflective application of the method of physical science, and availing themselves more of the aid of physiology. Nor again is the Neobaconian logic of Mr. Mill less essentially English, in the main, than his empirical psychology. It is almost solely in his sixth book when he comes to apply his logic to the moral sciences that the influence of Comte becomes prominent.

But it is precisely this side of Comtism that our author almost ignores. That his acquaintance with the "utopia positiva" is not close may be inferred from his assertion that it was nearly being realised in Paris under the Commune : and again from his praise of Mill's moderation in repudiating Comte's "principii excessivi della riforma civile" (!). Hence, when he pronounces that "niuno indagine morale, degno di questo nome, può trovar luogo nelle doctrine positive di Francia," we perceive that this judgment is founded entirely on *a priori* arguments. And these arguments have much force : only they really tell against Comte's methodical consistency. A strictly "objective" study of mankind as a collection of organisms placed in certain temporal and spatial relations to each other, mutually dependent for their preservation, but occasionally acting on each other destructively, affords no basis for any systematic direction of conduct. But Comte's objective psychology does not exclude notions whose content belongs entirely to introspective observation : it only insists on employing them uncriticized, just as the unreflective mind furnishes them. And so his sociology deals throughout with facts not expressible in terms of matter and motion : facts that have indeed an objective aspect, but a very obscure one, and whose significance is entirely subjective : as, *e.g.*, the law of the three stages of belief. Hence Comte's exclusion of empirical psychology does not prevent him from having a characteristic and coherent view of ethics : it only gives his utilitarianism an unreflective, unanalytical stamp. At the same time, by not taking the attitude of introspection, he naturally relieves himself from the necessity of reckoning with the claims of the egoistic reason, which become prominent in this attitude. It is interesting in this aspect to compare him with Bentham. Both thinkers take universal happiness as the end of human action : but when the individual's Practical Reason demands from Bentham a demonstration of his end, he ignores its rationality and labours to provide the individual with motives instead of reasons : while Comte ignores its practicality, and offers historical and phrenological reasons which are not to the point. It would have been well if S. Barzellotti had noticed this : because his chief criticism is directed to Mill's Utilitarianism : and the perplexed and perplexing character of this is due to the effort to combine the self-sacrificing sociality of Comte with the socialised selfishness of Bentham, and yet to answer the question which both evade. The moral man of Mill is to be "disinterested" like Comte's : yet he is to be controlled entirely by "sanctions" (pleasures and pains) like Bentham's : at the same time an attempt is made to demonstrate to his reason that universal happiness is the true end of action. S. Barzellotti criticizes closely some of the weak points in this composite result : but he misses the full explanation of them to which his line of study should have led him. He notices Mill's confusion of rational and emotional elements in moral action, or more particularly

of the dutiful and sympathetic impulses, which have a phenomenal distinctness undeniable on any system. And he argues effectively against the contemptuous treatment of the question of the objectivity of moral rules, as belonging to transcendental metaphysics and practically indifferent: whereas it is a fact of inner experience that on the belief in such objectivity depends the force of the moral impulse to obey them; in so far as strictly moral. Nor is his assumption that "il bene dell' individuo" is "mossa inevitabile dell' utilismo" unwarrantable as regards Mill, though it leaves Comte out of sight; but he does not unravel the curious intrication of methods by which Mill passes from the individual to the universal good.

His attack, however, is principally directed against the psychological rather than the strictly ethical theory of the Associationist writers: that is against their "reduction" of the free choice of good which moral action implies to completely determined pursuit of pleasure and avoidance of pain. His argument is divided into parts, each of which is given separately: the first considers the question of Freedom and Determination apart from the direction of voluntary effort: the second concerns the possibility of exhibiting the impulse towards virtue as a complicated and peculiarly modified case of the natural and universal tendency to seek pleasure. In both parts his reasoning is careful and intelligent: but in neither does it go precisely to the point. He thinks that Mill fails to discern the quality of freedom in volition, because he restricts introspective observation to *past* phenomena, represented in memory: but the point of Mill's argument is that freedom, implying the ability to do something other than we actually do, is intrinsically incapable of being immediately observed: we can only be conscious of actualities, not possibilities. Nor, in discussing the Associationist derivation of virtue, does our author fairly meet the analogy to which Mill's term "mental chemistry" appeals. He merely asserts that the aggregation of phenomena of one kind (sensations active and passive) cannot account for the existence of a phenomenon qualitatively or (as he says) *formally* different: but what the Associationists contend is that the difference is only apparent, as the difference between a compound and its elements in material chemistry. We all agree that the elements of a salt, &c. are present in the compound substantially the same, though changed in form; so, it is maintained, are the complex and derivative phenomena of mind *substantially* identical with the simpler and more elementary.

As I have been forced to dwell chiefly on what have appeared to be mistakes and misapprehensions in S. Barzelotti's treatise, I must conclude by saying that it is, in spite of them, throughout instructive, interesting, and well written.

H. SIDGWICK.

Notes of Discoveries and Scientific Work.

Geology.

On the Geology of the Eureka Settlement in Nevada.—At the Academy of Sciences of California, Prof. Whitney exhibited a collection of fossils formed by Mr. J. E. Clayton in Nevada, near the 116th meridian, and not far from the mining settlement of Eureka. These fossils are of great interest, in that they represent the primordial or Potsdam beds of the Silurian era, and exhibit the same combination of genera and species of the *Lingulidae* family of the Brachiopods and the *Paradoxidae* family of Trilobites which characterize this group farther east. The same *Agraulos* (*Arionellus* of Barraude, and *Crepicephalus* of D. Owen, Meek, and Hayden) which occurs in the Big Horn Mountains, near longitude 107° is found in this collection from the 116th meridian. There is also a *Conocoryphe* (*Conocephalites*), but *Agraulos* is most abundant. The brachiopods appear to be represented by at least two genera, *Lingulepis* (*Lingula*) and *Obolella*. The lithological character of the rock in which these fossils occur is likewise of importance, as it is not a sandstone, but a limestone.

The Muschelkalk of the Eastern Alps.—There has hitherto existed a wide gap between the Muschelkalk of the Alps and Germany as regards their palaeontological features. E. von Mojsisovics (*Verhandl. der k. geol. Reichsanst.* 1872, No. 9, 191) has recently made the interesting discovery of a rich Cephalopoda fauna in the Lower Muschelkalk of Monte Cucco, near Friuli, in the Alps, containing new forms of Ammonites, though the greater part are closely allied to the species of North Germany occurring in the Lower Wollenkalk, such as varieties of the species *Am. Ottonis*, v. Buch, and others. It is remarkable that this newly discovered horizon of the *Am. Balatonicus*, which is a variety of *Am. Ottonis*, has also been found in Hungary in the Bakonyer Wald, a continuation of the Alps to the eastward, where it falls below the niveau of *Arcetes Studeri*, and rises above the beds of the *Rhynchonella decurdata*.

Nummulitic Limestone from the Neighbourhood of Modena.—G. Mazzetti publishes in *Extr. dall' Annuario della Società dei Naturalisti* (Modena, 1872), thirteen new fossil species from the nummulitic limestone of Montese, near Modena. In the marly variety of the limestone, there are *Marginella*, *Mitra Michelotti*, *Terebellum*, *Cassis variabilis*, *Natica mammillaris*, *Pecchiola argentea*, and others; and from the hard limestone were obtained *Avicula*, *Cardium*, *Terebratula Montevii*, *Schizaster canaliferus*, and two Echinodermata of the family of *Cidaridae*.

On Atolls or Lagoon Islands.—At the meeting of the Geological Society of London on 8th May, S. J. Whitnell endeavoured to show that the areas of atolls are not at present sinking, and referred to an instance, that of Funafuti or Ellice Islands, where he thought signs of a slight upward movement could be traced. He called attention to the occurrence of furrowed appearances or a series of ridges or mounds in some islands, and attributed them to the action of a single gale.

The Glacial Phenomena of the Yorkshire Uplands.—At the same meeting, J. R. Dakyns stated that in Derbyshire and Yorkshire, south of the Aire, there is no glacial drift on the eastern slope of the Pennine chain, except where it is broken through by the valleys of the Wye and of the Aire and Calder. The basis of the Aire and the country northward is thickly covered with drift, which contains no rocks foreign to the basis, and thus points to formation by local action. The author ascribed this to the glaciation of the country, partly by glaciers, and partly by a general ice-sheet. Evidence of the latter he finds in the fact that drift occurs only on one side of the valleys, namely, on the leeside of the hills with respect to the source of the drift material. The action of glaciers may be traced in the great amount of scratched and rounded pebbles in the mounds of drift, which increase with the distance from their source, the presence of vast piles of drift at the junction of valleys, due doubtless to the shedding of the lateral moraines of two glaciers, and the existence of mounds of pebbles and of an alluvial deposit wherever a rock-basin crosses a valley. The Kames or Eskers, which are frequently met with in the valleys, he ascribes to the deposition of moraines in the sea instead of on land.

A Boulder Clay Section in Cheshire.—At the same meeting, D. Mackintosh directed attention to the occurrence of numerous sea-shells in a bed of Lower Boulder clay at Dawpool, of as completely glacial appearance, structure, and composition as any clay to be met with along the shores of the Irish Sea, and differing in no essential respects from the Pinel, which runs up the slopes and valleys of the Lake district. He pointed out a number of very important distinctions between the Lower and Upper Boulder clays of Cheshire, referring especially to the light grey or blue facings of the latter beds, and gave a list of a number of large boulders, greenstone and Criffell granite predominating, among the smaller stones Silurian grit being most prevalent. The author likewise explained the mode of striation of the stones found in the clay, and the position they occupied in reference to their flattened surface.

Notes on the Peninsula Mangischlak and the Aleutian Islands.—Dr. E. von Eichwald has published an interesting volume, entitled *Geognostisch-paläontologische Bemerkungen über die Halbinsel Mangischlak und die Aleutischen Inseln* (St. Petersburg, 1871). On the peninsula of Mangischlak, in the Caspian Sea, are found Lias and Middle Oolitic strata and several horizons of cretaceous age. The coal-beds of the peninsula are connected with strata which contain the *Am. Parkinsoni*, and the cretaceous strata are especially rich in fossils. In respect to the volcanic islands of the Aleutian archipelago, the author is of opinion that they are stratigraphically connected with the peninsula of Alaska, in common with which they have exhibited a slow movement of upheaval. Besides crystalline schists, numerous eruptive rocks of the trachyte and basalt groups have been noticed. Fragments of *Lichas* make the occurrence of the Silurian form probable. Other doubtful Palaeozoic deposits are mentioned, and some Neocomian beds described.

On Fossil Apes.—In *Extr. delle Atti della Società italiana di Scienze naturali*, vol. xiv. fasc. xv. 1872, C. J. F. Major gives a digest of what is at present known respecting fossil monkeys, from which we gather that at present nineteen species have been determined. Of the

sub-order *Lemuridae*, there are no fossil representatives, though the Eocene genus *Cœnopithecus* forms a link between the *Lemuridae* and the *Simiidae*. The *Arctopithecini* are represented in the Brazilian caves by two species of *Tacchus*. The remainder of the cave-species of Brazil belong to the *Platyrrhini*, and all the other fossil monkeys are *Catarrhini*. The *Cynomorpha* are represented by three to four species of *Semnopithecus*, three species of *Macacus*, and one species of *Mesopithecus*; the *Anthropomorpha* are represented by four species, of which three belong to the genus *Hylobates*, and the fourth is allied to the ourang-outang.

On the Gasteropods of the Miocene and Pliocene Formations of Modena.—Professor F. Coppi has just published in Modena a monograph on the Gasteropoda of the Miocene and Pliocene beds of this province, and describes in this most important work eighty-three species of the families of the *Dentalidae*, *Calyptraeaceae*, *Tubispiridae*, *Turritellidae*, *Tornatellidae*, *Bullaceae*, *Solariidae*, *Turbinidae*, *Xenophoridae*, *Naticidae*, *Cancellariidae*, *Cerithiaceae*, *Muricidae*, *Conidae*, *Ficulidae*, *Chenopidae*, *Cassidae*, *Buccinidae*, *Olividae*, *Cypraeidae*, and *Volutidae*.

Botany.

The Leaves of Drosera.—M. Ziegler has contributed to the *Académie des Sciences de Paris* (*Comptes rendus* for May 6) a series of observations on the irritability of the leaves of the sundew (*Drosera*). He finds that the hairs on the leaves exude from their extremity a small drop of glue, by which insects are caught. After an insect becomes attached, the exterior threads bend over it, covering it like the fingers of a hand, and do not straighten again till some days after, when a fresh drop exudes for a fresh prey. Albuminoid animal substances, if held for a moment between the fingers, acquire the property of making the hairs of the *Drosera* contract; except by contact with a living animal these substances exert no action on the hairs; and they lose their singular property by being repeatedly moistened with distilled water, and dried each time in a water bath. In order to prove that the contraction of the hairs is not caused by animal heat, the substance was cooled before placing it on the leaf. The sensitiveness of the hairs disappears after repeated application of the albuminoid substance, and their properties then appear to become reversed, showing similar sensitiveness to sulphate of quinine, which again restores them to their original condition of sensitiveness to insects after application for a sufficient length of time. In all cases the contraction of the hairs is slow, commencing visibly in about a quarter of an hour, and is often not completed till after several hours.

The Marine Algae of St. Helena.—In the last number of the *Journal of the Linnean Society* (No. 67, May 29) is a list, by Dr. Dickie, of the seaweeds of the island of St. Helena. The number is only eighteen, including one representative of the olive, thirteen of the red, and four of the green series; with three exceptions, they are very dwarf. When the very remarkably endemic character of the original land-flora of the island is considered, it is very singular that, with two doubtful exceptions, there is not a form of marine plants peculiar to the island; all are species more or less widely diffused, and most of them occur on both sides of the equator. About one-half are Cape forms, and one is Australian. The total number is very small for an island ten miles long by seven broad. The island of Kerguelen, much farther removed from any continent, has thirty-nine species, eight being olive, nineteen red, and twelve green; and of these five are, as far as is known, peculiar to the island, all the others being derivative; and, like those of St. Helena, many of them have a wide distribution in both hemispheres; a few are South American species.

The Flora of the Island of St. Paul.—The volume of the *Verhandl. der zoologisch-botanischen Gesellsch. in Wien* for 1871 contains an account of the flora of the island of St. Paul, in the Indian Ocean. There is a long list of marine Algae, and a few Lichens, Hepaticae, and Ferns; but the number of flowering plants recorded is only nine, constituting, probably, the poorest phanerogamic flora in the world. Of these, six are grasses, one a sedge, there being besides a *Plantago* and a *Sagina*; the two latter only are new and undescribed species. As the seven remaining species are all widely distributed plants, one at least being European, and are among those most easily propagated involuntarily by human agency, they have most probably been introduced. The number of flowering plants actually native is thus in reality reduced to two.

Effects of the Eruption of Vesuvius on Vegetation.—Sig. G. A. Pasquale contributes to the *Accademia delle Scienze fisiche e matematiche* of Naples a paper on the effects of the recent eruption of Vesuvius on the plants in the neighbourhood, of which the following is a *résumé*. The newest vegetation has suffered from contact with the ashes, though the effect has been neither a scorching nor drying-up. The action has not been a mechanical one, for a mere closing of the pores of the epidermis could not have caused death in so short a time. The closing of the pores and stomata undoubtedly produces a secondary effect, but

only after the lapse of some days. No change has been observed similar to that produced by the vapour of boiling water. The action of a high dry temperature occurs only in places in the immediate vicinity of Vesuvius. Neither an acid nor an alkaline reaction is shown by any change of colour, except a few instances of a change to blue of rose, orange, or violet coloured organs, which might be attributed rather to an alkaline than an acid reaction; but these are few and doubtful. Many phenomena concur in pointing to chloride of sodium as the chief agent in the destruction of vegetable tissue. The salt was present in sufficient abundance in the falling ashes to be readily discernible to the sight, and is also met with as an efflorescence on the ashy soil.

Structure and Source of the Wax of Plants.—Prof. de Bary publishes a paper on this subject in the *Botanische Zeitung*, thence abstracted in *Nature*. The wax does not appear to be a simple coating on the surface, and to form a continuous layer, as though laid on with a brush. It is found to be a dense forest of minute hairs of wax, each having one end on the epidermis, the other either rising straight up or rolled and curled amongst its neighbours. This matting of the waxy hairs is often sufficiently dense to give the surface, when viewed by the microscope, the appearance of a continuous layer, though a good section of the leaf or skin of the fruit indicates its true structure. The question as to what part of the epidermis or subepidermal tissue forms the source of the wax is most beautifully and clearly answered. Prof. de Bary states that it is impossible to discover the slightest trace of wax in the cell contents, or to entertain the theory that chlorophyll is partly made of wax. The locality in which the wax can first be detected is the cuticle and the cuticularised elements of the epidermis cells.

Physiology.

The Functions of the Laryngeal Nerves.—Dr. Navratil, the author of a paper in the *Medical Times and Gazette* for June 15, draws the following conclusions from his experiments:—1. The *N. laryngeus superior* has no influence whatever on the motory sphere of the larynx. 2. The *N. laryngeus inferior seu recurrens vagi* is the nerve which supplies the muscles of the larynx; the expanders, contractors, and dilators of the vocal cords are under its influence. Hence any interruption of the functional powers of this nerve causes paralysis of the corresponding half of the larynx. If both recurrents are interrupted in their functions, all the muscles of the vocal cords become inert, and the vocal cords assume the position seen after death. 3. The *N. accessorius Willisii* has no influence whatever on the muscles of the larynx. 4. The division of the vagi is attended with fatal consequences; but an animal may live for some time after the division of the recurrents. Hence they conclude that the assertions of Claude Bernard, according to whom the *N. accessorius Willisii* over the jugular foramen might lead one to conclude that the nerve inoculated with the motor fibres of the vagus nerve at that point, and that the observed paralysis of the glottis contractors was rather to be ascribed to this circumstance; whilst in their experiments Willis's nerve was divided in the spinal canal, consequently before any commixture took place.

The Antagonism between the Actions of Physostigmia and Atropia.—A long and valuable paper, with this heading, by Dr. T. Fraser, appears in the third part of vol. xxvi. of the *Transactions of the Royal Society of Edinburgh*, which has just been published. Two or three instances of antagonism have already been traced, notably that between the lethal action of prussic acid and the physiological action of atropia, and that between the lethal action of muscaria and the physiological action of atropia. The physostigmia examined by Dr. Fraser is well known in ophthalmic surgery as Calabar bean, and its active principle, eserine or physostigmia, possesses the remarkable power of contracting the pupil, whilst atropia, the active principle of belladonna, produces wide dilatation. Dr. Fraser experimented with rabbits and dogs, and used an alcoholic extract of the bean, the base having been converted into a sulphate by the addition of dilute sulphuric acid. This was so potent that 0·12 of a grain was sufficient to kill a rabbit weighing three pounds. Experiments made with sulphate of atropia showed that from 20 to 24 grains were required to kill a rabbit weighing three pounds. In both instances the solutions were applied by subcutaneous injection. To show the antagonistic action of sulphate of atropia to physostigmia, a small quantity of atropia, 0·17 of a grain, or from that quantity to 0·5 of a grain, was injected beneath the skin, and, after a few minutes had elapsed, a poisonous dose of the physostigmia was injected. Symptoms usually made their appearance indicating the toxic influence of both drugs, but after a time the animal recovered. After the lapse of some days, when it was quite restored, the same quantity of the extract of physostigmia was injected without any atropia, and it was usually found that the animal died. It is thus uncontestedly shown that atropia exerts a powerful counteracting influence to the lethal action of physostigmia. Further experiments showed that whilst $\frac{1}{4}$ of a grain of sulphate of atropia is too small a dose to prevent death after a dose of physostigmia one and a half times as large as the minimum lethal amount, $\frac{1}{4}$ of a grain is suffi-

ciently large to do so, and that doses of sulphate of atropia ranging from $\frac{1}{3}$ of a grain to $4\frac{1}{2}$ grains are able successfully to counteract this dose of physostigia; on the other hand, death occurs when the dose of sulphate amounts to $4\frac{1}{2}$ grains. This effect can be explained by supposing that there are certain actions of both physostigia and atropia which do not counteract one another, but whose sum exerts a fatal influence. Similar experiments were made with different proportions of the two drugs, and the results are given very clearly in a diagram.

The Influence of Respiration on the Circulation.—In a paper on this subject by Dr. Ewald Hering (contained in vol. Ixiv. of the *Sitzungsberichte* of the Vienna Academy, and republished by Stricker in the current part of the *Medizinische Jahrbücher*) are given the results of a considerable series of experiments on dogs, undertaken with the view of determining the influence of respiration on the circulation. He states that during an examination of the influence of the vagus on the respiratory movements, he found artificial inflation of the lungs to exert a remarkable influence on the cardiac movements. If air be blown in through a canula, and its escape prevented by a stopcock, the beats of the heart increase in frequency. In his experiments he introduced one end of a T tube into the trachea, and attached a second orifice to a manometer, while the third was left free, so that the animal might breathe by it, or through it insufflation might be carried on; a manometer was also introduced into the carotid. It was found that, when the tension of the air within the lungs was augmented, the pressure of the blood in the arteries fell to an extent increasing in proportion to the pressure of the air in the lungs. This effect is obviously due to the greater resistance the blood experiences on entering the chest, and to the obstacle the expanded lung presents to the passage of the blood through its capillaries. The heart's beats increased in frequency at the same time, and in proportion to the tension of the air in the lung; where the cardiac movements had previously been slow, they sometimes rose to three times their previous number. The animals were always under the influence of opium. Four questions suggested themselves in regard to this increased frequency of the beats. 1. Is it due to the greater pressure under which the heart acts? 2. Is it owing to the altered conditions of resistance to the current of the blood? 3. Does it arise from disturbances in the exchange of gases; or 4. Is it occasioned by a forcible dislocation of the heart. He considers the arguments in each case at length, and finally arrives at the conclusion that the acceleration of the cardiac beats on insufflation of the lungs is affected reflectorially through the vagi; the action of the centres of the inhibitory fibres of these nerves being lowered by the excitation of the sensory fibres distributed to the lungs.

Experiments on the Movements of the Uterus.—Dr. Oser and Dr. W. Schlesinger, in a communication to *Stricker's Medizinische Jahrbücher*, Jahrgang 1872, part i.), give the following result of their enquiries: By suspension of the pulmonary respiration through rapid loss of blood from the system generally, or by arrest of the flow of blood to the brain, a condition of excitation is established in the brain which causes movements of the uterus.

Detection of Syphilis by Examination of the Blood.—A controversy conducted with considerable acerbity on both sides is now in progress at Vienna. Dr. Lostorfer, who is supported by Professor Stricker, maintains that peculiar corpuscles, which undergo definite changes, are recognisable by the microscope in blood that has been withdrawn from the patient, and kept a day or two with due precaution in moist air; that such is the case is strongly contested by Professor Wedl and others. Professor Stricker states in a paper contained in his *Jahrbücher* (Jahrgang 1872, part i.) that he furnished a considerable number of specimens of blood to Dr. Lostorfer, some taken from syphilitic, some from non-syphilitic persons, and that, except when the preparation was spoiled before being kept the required length of time, Dr. Lostorfer always, or almost invariably, detected those that were from syphilitic patients. Should this observation be confirmed by other enquirers, it will constitute an important step in pathology. Dr. Lostorfer carefully abstains from stating that these corpuscles are the cause of the disease, and merely maintains that they constantly accompany or are associated with it.

New Publications.

- AMOS, S. A Systematic View of the Science of Jurisprudence. Longmans.
- BÜCHNER, T. Lehrbuch der anorganischen Chemie. III. Abtheilung. Braunschweig: Vieweg.
- ERLECKE, A. Bibliotheca Mathematica. Systematisches Verzeichniss der bis 1870 in Deutschland auf den Gebieten der Arithmetik, Algebra, Analysis etc. erschienenen Werke. I. Abtheilung. Halle: Erlecke.
- HEGER, R. Elemente der analytischen Geometrie in homogenen Coordinaten. Braunschweig: Vieweg.
- KLEIN, H. J. Handbuch der allgemeinen Himmelsbeschreibung. I. Theil: Der Fixsternhimmel. Braunschweig: Vieweg.

- KOBELL, F. v. Die Mineraliensammlung des bayerischen Staates. München: Franz.
- LASAULX, A. v. Das Riesige und das Winzige in der Geologie. Bonn: Cohen.
- LUTHER, E. Astronomische Beobachtungen auf der Universitäts-Sternwarte zu Königsberg. 36. Abtheilung. Leipzig: Rein.
- LYELL, C. Principles of Geology. Eleventh Edition. Vol. II. Murray.
- MARTIN, E. Mémoires et Débats sur les grands Principes des Sciences physiques. 1^{re} et 2^e livraisons. Paris: Lacroix.
- MAYER, J. R. Mémoire sur le mouvement organique dans ses rapports avec la nutrition. Traduit de l'allemand et suivi d'une note sur l'unité des forces et la définition de l'électricité par L. Pérard. Paris: Masson.
- OBERDIECK, J. G. C. Beobachtungen über das Erfrieren vieler Gewächse und namentlich unserer Obstbäume in kalten Wintern. Ravensburg: Ulmer.
- REICHARDT, E. Grundlagen zur Beurtheilung d. Trinkwassers. Jena: Mauke.
- REYE, T. Die Wirbelstürme, Tornados und Wettersäulen in der Erdatmosphäre, mit Berücksicht. der Stürme in der Sonnenatmosphäre. Hannover: Rümpler.
- SCHLAGINTWEIT-SAKÜNLÜNSKI, H. v. Untersuchungen üb. die Salzseen im westlichen Tibet u. in Turkistan. I. Thl. München: Franz.
- SMEE, A. My Garden; its Plans and Culture. Bell and Dalry.
- STEUR, E. Ethnographie des Peuples de l'Europe. Tome premier. Bruxelles: Muquardt.
- WECHNIAKOF, T. Contribution à une Histoire générale et encyclopédique des Sciences considérée au point de vue anthropologique. Moscou: Typ. de l'Univ. imp.

History.

Lives of the Archbishops of Canterbury. By W. F. Hook, D.D. F.R.S. Vol. IV. New Series. Reformation Period. Bentley and Son.

THE readers of Dr. Hook's *Lives of the Archbishops* had long been awaiting with more than ordinary curiosity the appearance of the last published volume, containing the life of Parker, nor will they on the whole be disappointed. Not indeed that there is much to interest or attract us about Parker himself personally, who was a conscientious, painstaking, methodical man, of good average abilities and considerable pertinacity, but wholly devoid of originality of mind or character, and with little enthusiasm. He is one of those safe and colourless characters who owe their place in history solely to the accident of position; and it is worth noting that his selection for the primacy was deferred—partly through his known reluctance for so perilous an eminence and partly through Elizabeth's anxiety to conciliate the Catholics—till after it had been offered to Dr. Wotton and probably also to Abbot Feckenham, who had been chaplain to Bishop Bonner, and refused by them. There is nothing about Parker of the zeal and vigour of Beckett, or Anselm, or Laud, and so little enthusiastic was he in the cause of the Reformation that, although deprived of his preferments under Mary as a married man, and perhaps also on account of his feeble complicity with the Northumberland plot, he remained otherwise unmolested through her reign, which Foxe naturally calls being cruelly persecuted. And this must have implied at least his outward conformity to the established worship, which we are told he "utterly disliked." He was, in short, a man with some of the weaknesses, but without the positive vices, of Cranmer, and of considerably more learning and sounder judgment. But the meritorious efforts of his biographer cannot rouse at best more than a very languid interest in Parker personally; the real importance of his life depends, of course, on the prominent part he was destined to play in the organization of the Anglican system. It was under his primacy, if not from his hand, that what came afterwards to be called the *Via Media* first took shape as a distinct scheme of ecclesi-

siastical doctrine and discipline; for the brief interlude of Edward's reign left no permanent traces behind it, except the doubtful legacy of two not very homogeneous Prayer-books, of which Elizabeth avowedly preferred the first, but eventually adopted the second, with some modifications, in deference to the Protestant or Puritan party, whom it was felt necessary to conciliate. It was, in fact, in Elizabeth's reign and during Parker's primacy that the English Reformation took place, so far as it can be assigned to any definite period and identified with certain specific acts; and it is, moreover, on the validity of his consecration that the Anglican claim to episcopal succession mainly hinges. On both grounds the history of his primacy has a critical significance for the ecclesiastical and the theological student, quite independent of the faults or merits of the man himself. And in this aspect only do we propose to consider it here.

Dr. Hook is careful to insist on the legal and historical continuity of the national Church before and after the Reformation, and it may at once be allowed, quite apart from the further question about validity of orders, to which we shall advert presently, that he is fully justified in doing so. There was certainly no legal break in the chain, and, except for the formal renunciation of papal supremacy, no profession of establishing the Church on a new basis, still less of establishing a new Church. The changes introduced in doctrine and worship were acquiesced in by the entire body of clergy and people, with a few insignificant exceptions: only the bishops for the most part stood out, but without attempting, like the Nonjurors afterwards, to perpetuate a separate succession. The *congé d'éluire* for Parker's election, which speaks of the see of Canterbury being vacant "by the natural death of the most reverend father and lord in Christ, the Lord Reginald Pole, Cardinal, the last archbishop thereof," and provides for "another archbishop and pastor" being chosen in his place, contains no more hint of any transition from one creed or communion to another than the *congé d'éluire* for any of his predecessors or successors. To say this is not to prejudge the theological issues involved, one way or the other. But the point is of considerable historical importance, and the author has done quite right in emphasizing it. His treatment of another cognate subject does not seem to us equally satisfactory. It is true, no doubt, that on Elizabeth's accession there was an extreme Protestant or Puritan party, greatly strengthened, if not created, by the suicidal severities of the former reign, while the immense majority of the nation was still Catholic at heart, though perhaps only a minority felt strongly about communion with the Roman see, and fewer still were prepared at all costs to adhere to it. But Dr. Hook's sharply defined classification of "Anglo-Catholics," "Romanists," and "Protestants," is surely an anachronism both in form and substance, and it is further complicated by his sometimes contrasting "Protestants," — who are elsewhere termed "ultra-Protestants" — with "Reformers," such as Henry VIII., Elizabeth, and Cardinal Pole, while he sometimes uses the word Protestant, in a sense more analogous to what it bears or used to bear in Ireland, as synonymous with "Anglo-Catholic." Nor can we admit that the queen belonged to this middle party in any other sense than that she was ultimately driven into it by the impossibility, on the one hand, of conciliating Paul IV., and the consequent political necessity of coming to terms with the Protestant section of her subjects and the Protestant interest in Europe generally. Had Julius III. been still alive, or had Pius IV. — who was apparently willing even to sanction the Anglican Prayer-book, as it stood, on condition of his authority being acknowledged — succeeded a year earlier, she would almost certainly have retained the nation in com-

munition with Rome. The still more pronounced sympathy of Sixtus V. came a full quarter of a century too late. Her religious convictions, such as they were, were indubitably Catholic, but always held in subordination to her political interests and the impatience of foreign dictation which had been more or less characteristic of English sovereigns since the Conquest, and was hereditary in the Tudor line. But if Dr. Hook is arbitrary in his classification of parties, he is quite equally so in his estimate of their theological standard. The Protestant or Anglo-Catholic party, for instance, is said to have had no great objection to the mass, while unable to tolerate transubstantiation or the elevation of the host, which they considered idolatrous. Yet transubstantiation is just as much presupposed by the sacrifice of the mass as by elevation. The sacrifice is not a mere commemoration of that on the Cross, still less a repetition of it, but is identical with it. And unless the body of Christ is really there, it can as little be offered in sacrifice as become the object of worship. And what makes this confusion of thought the stranger is that Dr. Hook quotes at length in a later portion of the volume what he justly considers (*pæc* the Judicial Committee) a very important letter of Bishop Gheast, the compiler of the Twenty-eighth Article in its present form, explaining it in a sense precisely accordant with the Tridentine doctrine of transubstantiation; "I said unto him, though he take Christ's Body in his hand, received it with his mouth, and that, *corporally, naturally, really, substantially, and carnally*" — the last term goes beyond the Tridentine statement, and looks almost like *σαρκοφαγία* — "yet did he not, for all that, see It, feel It, smell It, or taste It." In other words, the substance is changed, but the accidents remain.

There are other questions both of doctrine and fact which Dr. Hook seems only able to look at through strong Anglican, or, if he prefers the phrase, Anglo-Catholic, spectacles. Thus, to give one or two examples, he talks of "the Romanists," by which is meant Roman Catholics, "attributing to the Fathers the same kind of inspiration as was vouchsafed to the Apostles," a charge which might be more plausibly urged against some writers of his own school. The Council of Trent is oddly enough stated to have been "convened to define the faith according to the private judgment of the persons composing the assembly," as though such was its professed object. Still more oddly the want of learning among the mass of the Catholic clergy — which the Reformation, by the way did remarkably little to remedy — is ascribed to the time and mental energy absorbed by "a conglomeration of ceremonial details," as though the ritual of the mass, once mastered, had any more tendency to absorb and "dissipate the mind" than the rubrics of the Common Prayer-book, or as if Anglican services were not to the full as long and exhausting as those of the Latin rite. Elsewhere orders and marriage are called sacraments in the same sense as "the regal unction"! To speak again of "the Romish sect established in England by Cardinal Wiseman" consists as little with accuracy of fact as with the ordinary courtesies of literature, and is the language, not of historical criticism, but polemical spite. But a passing reference to such incongruities must suffice.

Considering its crucial importance to the claims of Anglicanism, we are rather surprised that Dr. Hook should have contented himself with so brief and unconnected a notice of the controversy about the Apostolical Succession, which he nevertheless designates "the fact which lies at the very foundation of the Church." All he has to say about it is comprised, with the admixture of several other matters, in the last fifty pages of a chapter nearly three times that length, and is chiefly to be gathered from the notes. He

may be right in opining that the dispute originated in ignorance or wilful misrepresentation, but at all events so vital a point, after being hotly contested for three centuries, requires not to be shelved, but to be settled. The objections to Parker's consecration may be summed up under three heads. There is first the question whether the alleged ceremony took place at all; secondly, whether the persons who took part in it were competent to convey the episcopal character; and, thirdly, whether they adopted the necessary means for doing so. On all and each of these grounds the validity of the consecration has been challenged.

1. The first objection may be most readily dismissed, for since Dr. Lingard's exposure of its "utter futility," no respectable controversialist would dream of maintaining the Nag's Head fable, first put forward in 1604, nearly fifty years after the event, in a work published by a Jesuit named Holywood, at Antwerp, and afterwards reproduced in five or six different versions. Suffice it to say here that there is overwhelming evidence to the issue of the *congé d'élire* for Parker's election, the royal assent to it, and mandate directed to seven bishops, ordering them, or any four of them, to confirm and consecrate him, to his confirmation by four of them on December 9, 1559, and his being publicly recognised as archbishop by the queen, and acting as such, on and after December 18, but not before. Dr. Lingard considers these facts alone conclusive as to his consecration on December 17, even were there no direct and positive testimony for it. But there is such testimony in abundance, quite independent of the authenticity of the Lambeth register, which, however, "there exists not the semblance of a reason," adds Lingard, for calling in question: and it is confirmed by the express assertion, frequently repeated both in public and private, of the Catholic Earl of Nottingham, who was himself present at the ceremony. The evidence for the fact will be found collected in the eighteenth chapter of Dr. Lee's learned and lucid work on the *Validity of the Holy Orders of the Church of England*, to which Dr. Hook is very largely indebted, though he has only once referred to it. We wish, by the way, that in citing Lingard's letter he had given it entire as it is given by Dr. Lee, instead of omitting, without any notice, paragraphs that offend him. It is on the second and third objections, and especially on the third, that the controversy really hinges. We cannot of course do more than very briefly summarise the salient points.

2. It is argued then, admitting the fact of the consecration, that Barlow, who performed it, had never been consecrated himself, and therefore had no power to consecrate others. To this there is a twofold reply. In the first place, allowing for argument's sake that Barlow was no bishop, the validity of Parker's consecration would not be prejudiced thereby. For the three who took part with him in the rite had unquestionably been consecrated—one of them, Hodgkins, according to the Sarum Pontifical—and it is equally certain that consecration conferred by a single bishop is *valid*, though, for greater security, the co-operation of three is required by canon law for its *regularity*. And if it is objected that the Anglican Ordinal does not, like the present Roman, direct the assisting prelates to pronounce the sacramental formula, so neither did the Sarum or York Pontificals, in use before the Reformation; but it is moreover expressly recorded that in Parker's case all four of them did pronounce the words. There is no real need however for dwelling on these points, for of the fact of Barlow's consecration there cannot be the shadow of a reasonable doubt. The indirect evidence for it is overwhelming, and the only shred of evidence to set against it is the omission of any entry in the Lambeth register, to which it is enough to reply

that the record of nine other consecrations performed by Cranmer, including that of Gardiner, as also of some performed by Archbishop Warham and Cardinal Pole, are equally wanting. Cranmer especially was notorious for his carelessness in keeping the registers. Lingard, after recounting the positive grounds for assuming that Barlow was consecrated, thus describes the argument urged by those who deny it:—"Why are we to believe these impossible, these incredible suppositions? Is there any positive proof that he was no bishop? *None in the world*. All that can be said is that we cannot find any positive register of his consecration. So neither can we of many others, particularly of Bishop Gardiner. Did any one call in question the consecration of these bishops on that account? Why should we doubt the consecration of Barlow, and not that of Gardiner? I fear the only reason is this—*Gardiner did not consecrate Parker, and Barlow did*." To raise the question of jurisdiction is simply irrelevant. That, on the received Roman view, lately endorsed by the Vatican Council, none of Parker's consecrators had or could have any jurisdiction, precisely because they were out of communion with Rome, is too obvious to require a moment's discussion. But it is also certain that, on the strictest Roman Catholic principles, the defect of jurisdiction would prejudice the regularity only, not the validity, of their acts.

3. The third objection is the most comprehensive and important, involving as it does various controverted questions both of doctrine and of fact, though it is not, as far as we can see, even once referred to by Dr. Hook. To argue it out would demand a treatise. We must be content to state results. The adequacy of the Edwardian Ordinal, maimed and meagre as it confessedly is, has often been admitted by Catholic divines, and certainly follows from the principles laid down by such high liturgical authorities as Martene and Morinus. It is implied in the brief addressed by Julius III. to Cardinal Pole, and acted on by him, and must have been expressly recognised by Pius IV. if the statement be accepted, for which Dr. Hook adduces strong evidence, that he offered to sanction the Elizabethan Prayer-book and Ordinal, as "comprehending all that is necessary to salvation." If, however, the question is mooted, it can only be met by an appeal to "comparative liturgiology," and this test has been exhaustively applied in seven successive chapters of Dr. Lee's work on the subject, dealing with a series of Eastern and Western forms universally allowed to be sufficient. The comparison makes it clear beyond possibility of cavil that the sufficiency of the Edwardian Ordinal, which differs in some points for the worse from that of 1662, can only be contested on grounds which would prove a great deal too much. The omission of the *traditio instrumentorum*, which has been chiefly relied on, is an objection which refutes itself; for the formula was only introduced into the Latin Church in the twelfth, or at earliest tenth, century, and has never been adopted in the East, as is expressly admitted by Perrone. There remains, however, the question of *intention*, and much ingenuity has been expended on the attempt to show that Barlow and Scory, two of Parker's consecrators, were heterodox on sacramental doctrine, and cannot therefore have intended to confer the episcopal character. If it were so, there would still be two of the four consecrators whose orthodoxy is not impugned, but the whole enquiry is really beside the mark. The intention required by the Council of Trent for valid administration of sacraments is simply "intentionem saltem faciendi quod facit Ecclesia" (*Sess. vii. can. 11*). A sacrament ministered, e.g. by a priest who was drunk or asleep, or acting in joke, would be invalid. But it certainly does not mean that his theological apprehension of its

nature must necessarily be correct, so long as he really intends to do what the Church does, or what Christ ordained. Bellarmine distinctly lays down this principle: "Non est opus intendere quod facit Ecclesia Romana, sed quod facit Ecclesia vera, quaecunque illa sit; vel quod Christus instauravit" (*De Sacram.* lib. i. c. 37). And in the performance of a public act the intention of those concerned to do what they are ostensibly engaged in doing must be assumed in the absence of any outward sign to the contrary, or doubt would be thrown on the validity of every sacrament ever administered. There can be no doubt whatever as to the act Parker's consecrators were commissioned to perform, and were on all sides understood to be performing. It was to consecrate a bishop, neither more nor less, and Dr. Hook argues fairly enough from the preface to the English Ordinal that the word bishop is unquestionably there "employed in the sense which has always been attached to it in the Catholic Church." Nor can there be a shadow of doubt that it was so employed and understood by Elizabeth and her advisers in Church and State. There is then no ground for doubting that the consecrators of Parker, publicly using that ordinal, intended to make him a bishop; nor would the validity of their act be affected if it could be shown that one or more of them held heterodox opinions about the grace of the sacrament.

Here the discussion, as far as Parker's case is concerned, might close. But it seems hardly respectful to so high an authority to pass over in silence Dr. Newman's recent contributions to the general subject in two letters to the *Month* for September and October, 1868, and a Note in his recently published *Essays Critical and Historical* (vol. ii. pp. 74 sqq.). Dr. Newman, however, professedly deals with considerations "independent of any question arising out of Parker's consecration," and, indeed, of historical, or, as he calls them, "antiquarian arguments," altogether; and it is of these alone that historians, as such, can be expected to take account. The arguments urged in the letters to the *Month* are of an *a posteriori* kind, such as the carelessness of the Anglican clergy in administering baptism, their irreverence about the Eucharist, and the like, which will appeal with very various force to different minds according to their theological or other bias, and their estimate of the facts alleged. The inference suggested would rather point to some possible break in the chain of succession after Parker's time. In the Note to the *Essays*, published last year, the argument is ultimately resolved into the further, and distinct, question of the exclusive claims of the Roman Catholic Church. "Catholics believe their orders are valid, because they are members of the true Church," and are not, therefore, called upon to adduce detailed evidence of the fact; whereas the *onus probandi* lies upon Anglicans, and, if we rightly understand the illustrious author, it is a burden they are, *from the nature of the case*, incapable of sustaining, because "there is no security for the transmission of the apostolical ministry, except as continued in that Church which has the promises," i.e. the Roman Catholic Church; "the orders depend on the Church, not the Church on the orders." And thus the argument is merged in the wider question of the notes and limits of the Visible Church. Into that discussion we shall not, of course, enter here, and with two general remarks on Dr. Newman's line of argument, this review must be brought to a close. In the first place, it is obviously not so much a plea in disproof of the validity of Anglican orders as a demur to the need for any discussion of a point which might be at once admitted if the Church of England were a true Church, but which, as matters are, is both immaterial and incapable of proof. It is obvious, in the next place, that the argument,

as stated in the *Essays*, tells equally against the security of the ordinations of the Greek and Russian Churches, and various heretical bodies in the East, which are, like the Anglican, incapable of mathematical proof, but have never been called in question, and are admitted by the theory and practice of the Church in communion with Rome.

It will be gathered from what we have said that there is much of interest in Dr. Hook's last volume, though it might well have been more skilfully put together. We may add that, besides other blemishes already referred to, it is disfigured by several strange slips of the pen or printer's errors—it is not always easy to say which—and that an alphabetical index, and a much fuller and more careful arrangement of marginal analysis and dates, is a crying *desideratum*.

H. N. OXENHAM.

NEW INSCRIPTIONS.

SOME months ago the casual upturning of a marble slab on Monte Cavi gave us the date of the abdication of the decemvir Appius Claudius and his fellow-tyrants, and now another slab discovered on the Forum Romanum furnishes us with that of the first triumph of King Romulus himself, and though few scholars of the present day may be inclined to give credit to this statement, even the most sceptical, we trust, will look with interest, and indeed with reverence, to these morning-mists of fable ushering in a long series of splendid and real triumphs; on the old duel between King Romulus, of newly founded Rome, and King Acron, of Caenina, now brought down to the first new-year's day of the new republic. The brief fragment runs thus:

ROMVLVS · MARTIS · F · REX · ANN · ii
DE · CAENINENSIVS · K · MARTIS
romulus MARTIS · F · REX · II · . . .
de antemnatisbus

The only two authors who give us extracts of that part of the triumphal table which regards Romulus are Solinus and Plutarch. Solinus tells us (c. i. 20) : *Romulus . . . de Caeninensis egit primum triumphum et Acroni regi eorum detraxit spolia . . . rursum de Antemnatis triumphavit, de Veientibus tertio*; Plutarch (*Rom.* 25) gives the date of the third triumph, the ides of October. These dates, though not really historical, nevertheless are curious enough. No doubt the two dates hitherto known of the triumphing of the son of Mars, the first king of Rome, coincide intentionally with two great festivals in honour of the god Mars, the kalendae Martiae being the feriae Martis of the old Kalendars, and in fact the birthday of the god himself (*C. I. L.* i. p. 387), the ides of October the day of the slaughtering of the victorious horse in the Campus Martius in honour of the same divinity (Marquardt, *Handbuch*, iv. 277). It may be noticed too that the old *fable convenientia* does not lack the accurate dates and the showy pragmatic appearance with which historical falsification has always decked its creations. Rome was founded on the 21st of April of the year 1, of course, the year beginning then on the 1st of March. For four months the new commonwealth was conducted, if not on strictly monastic principles, still without any assistance of the fair sex; but on the Consualia, the 21st of August, matrimony was introduced by the wholesale operation commonly known as the rape of the Sabine women (Plutarch, *Rom.* 15; Varro *de L. L.* c. 20). The autumn and winter, apparently, were given to diplomatic operations between the Romans and the various tribes that had suffered by the rape; as usual, they waited for spring in order to begin the war. But King Acron of Caenina was more forward than the rest, and began operations early and alone (*προεισέσθη τῷ πολέμῳ*, says Plutarch); so it came about that the first new year the republic saw was inaugurated by the entrance of the victorious king, carrying on his shoulders the trophies of the enemy slain by his own hand on the battlefield. When the great battle between the Sabines and the Romans was fought, the intervening ladies already were mothers.

The students of Roman law and classical antiquities may hope to get a monument of the same kind as the famous tables of Salpensa and Malaca, the only remnant of the privileges

granted by republican and afterwards by imperial Rome to their Latin cities. Mr. Ramiero de P. Caballero Infante y Quaro, a rich proprietor of Seville, has lately acquired three bronze tables, of two or three columns of thirty lines each, containing administrative regulations of the early imperial epoch. The fact is certain, as I have been informed by trustworthy and learned eye-witnesses ; but nobody is allowed to copy them, as the proprietor reserves to himself the privilege of the first publication. Nobody certainly will grudge it to him, if only he will make rational and moderate use of his right of proprietorship, and give soon what the public may justly claim as part of the grand heritage of ancient Rome.

TH. MOMMSEN.

Intelligence.

Dr. Aloys Sprenger, the well-known Semitic scholar, who for many years was resident in India, and is now living in Switzerland, proposes to write for the *Journal of the Royal Asiatic Society* a series of essays on the Early Geography, History, and Commerce of Arabia. Two of these papers have already been read at recent meetings of the society, and will, we understand, appear in the number of the society's *Journal* about to be published. In his first essay, Dr. Sprenger contested the views of those scholars who consider the Ishmaelites as the ancestors of the Northern Arabians. The indigenous traditions of the Arabians, which assign such an origin to the Ma'addites, can, he argues, be distinctly traced to the Jews, and are therefore valueless ; and even Mohammed had different notions regarding Ishmael after his flight from Medina from those he had held whilst residing at Mecca. The principal point Dr. Sprenger endeavours to establish is that the Ishmaelites were extinct in the fifth century of our era, and that, therefore, long previous to the Moslim conquest they had ceased to form a distinct race.—Dr. Sprenger's second paper treats of Aelius Gallus' campaign in Arabia in 18 B.C. He shows it to be probable that the work *De Expeditione Arabica* of Juba II., King of Numidia, and son-in-law of the Triumvir Antonius, was written for Augustus previous to Gallus' expedition, as a kind of report on the country about to be invaded. The account of Arabia and of the expedition given by Strabo, the personal friend of Gallus, was, Dr. Sprenger argues, on the contrary, written so as to represent Arabia as a complete *terra incognita*, and thus to exonerate Gallus from any blame for having failed to conquer that country. Dr. Sprenger then examines the geographical statements of these writers, especially those of Juba as given by Pliny, and endeavours to identify in a most interesting and ingenious manner the various names of places and tribes mentioned. Of his identifications the most important is that of the *Minaeans* of Greek writers with the *Kindites* of Arabian and Byzantine historians. Dr. Sprenger's papers will be found to throw much new light on this obscure chapter of ancient Arabic history.

Contents of the Journals.

Von Raumer's *Historisches Taschenbuch*, 1872, contains a biography of Maria, the wife of the Palatine Frederick III., one of the excellent women of the Reformation period, whose great-grandson married Elizabeth, daughter of our James I.—There is also an account of the Huguenot emigrants in Germany ; we may compare the corrupted names with those in England, e.g. de Ruffignac corrupted into Rough-neck.—Some light is thrown on the destruction of the Anabaptist state at Münster in 1535 from a contemporary (legendary) narrative.—A description of the Marquise du Deffand's life (well known to us from Horace Walpole) is given to illustrate the social state of the eighteenth century.—Of our own time, we have sketches of Maximilian II. of Bavaria, so celebrated in the world of artists, whose political idea was to balance and unite Austria and Prussia by a league of the little states under the leadership of Bavaria.—On the other side, Giesebricht gives us his recollections of Rudolf Köpke, one of the patriots of 1848, who just lived to see his scheme of German unity carried out in 1866—the intermediate time was spent in literary work on the national history of Germany. The interest of the whole number is thus mainly biographical.

Von Sybel's *Historische Zeitschrift*, 1872, 3rd part, contains an important article on the Icelandic sagas about the early times, especially that of Egil—the statements of which we can check from the information given by Ohthere, the voyager to King Alfred, about the state of the North at that time, and from the Anglo-Saxon Chronicle—since Egil is made to visit Athelstan and take a decisive part in the great battle against the Celtic and Norse invaders of England. The result of the enquiry is in both cases unfavourable to the authenticity of the saga.—A description is given of the election of Pope Urban VI. in 1378, which led to the great schism during which three popes were excommunicating each other.—An account of "the Jesuits in Syria" is interesting just at this time.—"The Regency in Greece, 1833-5," is a narrative of the unlucky attempt of the Bavarians, well intentioned but

pedantic men, to govern during King Otto's minority.—Among the shorter notices is a review of Freeman's *Essays* by Pauli ; and a reply by Büdinger to Dummler's essay on the historian Bishop Liudprand of Cremona.

Bullettino dell' Instituto, May, describes the various articles found at the Emporium, some of which show an active commerce with Spain ; the origin of the curious Monte Testaccio is also discussed, which is composed of fragments of pottery from the Emporium—the breakage of the imports during centuries : the inscriptions on some of the uppermost fragments bring us down to the fourth century A.D.—Jordan describes the Septizonium of Severus (the etymology of the word is difficult) as consisting of three rows of pilasters only.—Henzen gives the new fragments of the Fasti found in the Forum, the most interesting of which is described by Professor Mommsen in his letter to us (see p. 257).

New Publications.

BACON, F., Letters and Life of. By J. Spedding. Vol. VI. Longmans.
BOECKH, A. Gesammelte kleine Schriften. 6. Bd. Akad. Abhandlungen. Nebst einem Anhange, epigraphische Abhandlungen aus Zeitschriften enthaltend. Leipzig : Teubner.

BURTON and DRAKE. Unexplored Syria. 2 vols. Tinsley.

CALENDAR OF CLARENDRON STATE PAPERS IN THE BODLEIAN. Vol. I. Ed. by Rev. O. Ogle. Clarendon Press.

CALENDAR OF STATE PAPERS ; Foreign Series of the Reign of Elizabeth, 1566-8, preserved in the State Paper Department of H. M. Record Office. By Allan J. Crosby. Longmans.

ELLIOTT, The late Sir H. M. The History of India as told by its own Historians. The Muhammadan Period. Posthumous papers, edited and revised by J. Dowson. Trübner.

Philology.

NONIUS MAROELLUS PERIPATETICI TUBURSIOENSIS DE COMPENDIOSA DOCTRINA AD FILIUM COLLATIS QUINTAE PERVERTUSTIS CODICIBUS NONDUM ADHIBITIS CUM CETERORUM LIBRORUM EDITIONUMQUE LECTIONIBUS ET DOCTORUM SUISQUE NOTIS EDIDIT LUD. QUICHERAT. PARIS : HACHETTE.

THE present generation is probably more familiar with the name of Nonius than any since the Renaissance, if not indeed than any since the work was first published ; for it may safely be asserted that at no other period has the study of remains been more absorbing than the present, and the widely extended circulation of Ribbeck's *Tragorum* and *Comicorum Latinorum Fragmenta*, Vahlen's *Ennius*, Riese's *Varronis Saturae*, Peter's *Historicorum Romanorum Reliquiae*, and other collections of a like kind, present no name so habitually as his. Nonius is, in fact, our great repository of early Latin fragments ; of Lucilius alone, five hundred passages, according to M. Quicherat, are preserved by him. He is besides the only ancient author who has preserved considerable excerpts from the lost works, particularly the *Saturae*, of Varro ; and no one who has not studied these can have any clear conception of the manysidedness of Latin literature in the splendid period of Cicero, Catullus, and Lucretius. Of all the great Roman writers, Varro seems to have been the most deeply learned in the language and antiquities of his country ; but the fragments of the Menippean satires show him besides in the double character of a humourist and an innovator in language ; and are interesting enough to make us wish that we could have bought only one of them by the sacrifice of part of his equally voluminous, but much more religiously preserved contemporaries.

The MSS. of Nonius go back to the ninth century. This seems to be the date of the valuable Harleian, excerpts from which had been published before, particularly in Riese's *Varronis Saturae*, but which M. Gustave Masson has collated throughout for M. Quicherat. Of the great value of this codex I can speak from experience, having collated a large number of the fragments of Lucilius in it ; and there can be little doubt that no restoration of the more obscure Nonian passages can be considered certain until the first reading of

Harl. has been carefully made out. In some places it preserves traces of a reading prior to the corruption which, in common with other MSS., it adopts; in others its agreement with the rest of the early MSS. enables us to decide with certainty in favour of readings or spellings hitherto rejected as improbable. For instance, at p. 125, *ientare, ientaculum* is written in Harl. throughout *ientare* (*iecentare*), *ientaculum*; this is also found in three others of the MSS. collated by M. Quicherat; and it is in all probability right, as Ribbeck has seen, though M. Quicherat adheres himself to *ientare, ientaculum*. So again Harl. gives *permities* not only at p. 153, where Roth and Gerlach also give it from their MSS., but at p. 218, *pestem permitemque catax quam et manlius nouius* (*nouis* is a later alteration), and in the quotation from Attius; and here also, I think, rightly, against Roth and Gerlach's MSS. So, again, at p. 131, the passage from Varro's *Catus male enim consuetudo diu inprobo rata est inextinguibilis*, for so it is written in Harl., explains its own corruption, *i.e. inrobora*. Here most of the MSS. are in the second stage of corruption, *improrata*, whence the *importata* of many editions. Besides Harl., the chief MSS. newly employed by M. Quicherat for his edition are—(1) M, the Montpellier, much mutilated, but of independent value; (2) P, No. 7667 in the library of Paris, partially collated by Reuvens for his *Collectanea*, 1815; (3) C, or Colbertinus, 7666 of the same library; all these belong to the tenth century; (4) O and Q, two Paris MSS. of the fifteenth century, on paper. Besides these he has availed himself of the collation of the excellent Wolfenbüttel codex, which makes Gerlach and Roth's edition so authoritative, as well as of others at Basle, Berne, Geneva, and Leyden. With such resources the new edition of Nonius cannot fail to be interesting: though the actual variations of the new MSS. are perhaps less considerable than might have been anticipated. The conjectures of a long series of critics are on the whole adequately represented in the apparatus; and owing to the small size of the type in which the apparatus is printed, the reader is not distressed by anything like a disproportion between the text and the notes. Moreover, the references are given, book and line, side by side with the extracts; and much time is hereby economized. Again, verse is printed as verse, prose as prose; and though it is not to be forgotten that in some cases what looks like prose may be really verse, *e.g.* in passages of Varro's *Saturae*, yet it is better to read what is uncertain verse as prose than what may be prose as verse. In fact, M. Quicherat's edition of Nonius is to an ordinary reader a sufficiently attractive book not to repel, and perhaps to attract, him.

The case is however very different with an advanced student of Latin. To such the edition of Roth and Gerlach will, if I mistake not, still be the edition. For it presents with unexampled clearness and unrivalled fidelity the *exact text* of Nonius, with its corruptions, misspellings, and even mistakes as they are in the MSS.; an advantage almost incalculable in an author where so much is necessarily uncertain, and where so large a part of the gain of perusal consists in the careful study of recurring palaeographical or orthographical confusions. It has been elsewhere observed by me that in no author is the interchange of *v*, *b* more frequent than in Nonius; it may be added that in no author, it would seem, have the MSS. preserved on the whole, if we take the Harleian and one or two others as our guides, a more careful orthography. This remark is much more important than at first sight it may seem: for we are dependent on Nonius for the greater part of the fragments of all the lost writers of the early period of Latin literature. If then, at p. 113, where a passage of Sisenna is quoted, the words *fera bite* occur twice, is it certain that Sisenna wrote *fera*

uite? We do not reason so in other cases; where *permities* is repeated, we accept the repetition as significant and real. We accept *rinoceros* as the probable spelling of Lucilius, on the showing of Nonius; he may also have written *cocendicas*, *cocendicibus*. At any rate, once give up the principle of following the best MSS., and uncertainty is the inevitable result. The few pages of early inscriptions in the first volume of Mommsen's *Corpus*, and the very limited number of words which they contain, are, to say the least, a very inadequate standard for the spelling of the whole ante-imperial period.

From this point of view, then, it is impossible to overrate the merits of Roth and Gerlach's *Nonius*, a book, in its way, of unique correctness and fidelity. For the same reason it is impossible to speak with entire satisfaction of M. Quicherat's performance. Take as an instance p. 229: *Tarditas generis feminini. Masculino Varro Vimarco: ne me pedatus uersum tardor [neprenet tarte cum pritymon certum;* so R. and G. M. Quicherat changes *Vimarco* to *Bimarco*, *pedatus* to *pedatu primo*, *neprenet t. c. p. certum* to *Refranet, arte quum premo p̄vθūn sertum*. It would surely have been better to have indicated that a disyllable is lost in the first line than to introduce a word which, like *primo*, spoils the evenness of the metre: in the second line, *refranet arte rhythmon*, all are probably right; *cum premo* is doubtful; it might as easily, or more so, be *cum parit* (*perit*, then *pit*); *arte* is thus ablative and *rhythmon* accusative: *certum* is not to be altered. Take again the interesting fragment from Lucilius, p. 428, where the poet distinguishes *poesis* from *poema*. M. Quicherat has not only altered this unnecessarily, *e.g. quidve hoc intersit illud to q. h. intersit et illud*, but actually introduced a metrical enormity. The MSS. give *primum hoc quod dicimus esse poema pars est parua poema* (*poesis*, some MSS.) *idem epistula item queuis non magna poema est illa poesis opus totum totaque illa summa est una θέρις ut annales Enni atquestoc unum est hoc maius multo est quam quod dixi ante poema.* This is given by M. Quicherat thus:

Primum hoc quod dicimus esse poema
Pars est parua poesis ut est et epistola queuis.
Illa poesis opus totum; tota Ilias una
Est θέρις, aut Annales Enni; atque hoc [opus] unum
Est maius multo quam quod dixi ante poema.

This, to say the least of it, is no improvement on the conjectures of previous editors. It is more natural to suppose, with L. Müller, a lacuna before *epistula*:

Pars est parua poema
Epistula item queuis non magna poema est.
Illa poesis opus totum; tota Ilia summa est
Una poesis ut Annales Enni; atque si (h)oc unum est,
Hoc maius multo est quam quod dixi ante poema.

Poiesis for *θέρις* is an old conjecture of Mercer's; the rest is little more than drawing out the words of Nonius; there is nothing to show that Lucilius did not shorten *hoc* as Seneca did after him; the meaning is clear. "Again any particular letter of no great length is a poem; but that other word *poesis* means a complete work: thus the complete whole of the *Iliad* is a single *poesis*, like the *Annals* of Ennius; and if this is *one*, it is a *one* that is much greater than the short poem I spoke of before." In the last words he seems to answer a possible objection: "if *poema* is a single piece of poetry, *poesis* would seem to be an aggregate: how then can it be *one*? Answer: it is *one* as a whole, and differs in its oneness by being much larger than a single *poema*."

Again, if M. Quicherat prints his own clever conjecture *σωμαθμοι* in the corrupt article *gralatores*, p. 115, might he not have admitted Lachmann's admirable emendation of the passage from Varro's *Eumenides*, p. 119? Part of it, at least, seems certain, and is in the great critic's best style. Nor can it be denied that such arbitrariness in spelling as is too

perceptible throughout this edition of Nonius is unsatisfactory, and unworthy of M. Quicherat's reputation. If the MSS. give *attendere harundo conubiis gargaridians caelum coicere dicere Medientius dimittere illico holerorum*, on what principle do we find printed *attendere arundo connubiis gargaridians coelum coniicere deiicere Mezentius demittere illico olerorum*? If *dissicit delica* are allowed to remain, as they rightly are, why change such interesting remains of ancient Latin as the use of an abl. *qui*, after a plural noun in the article *gralatores*; especially when, as has been pointed out by M. Meunier (*Mémoires de la Société de Linguistique*, i. p. 24), the same writer Varro seems to have written, *L. L. ix. 67, unguenta quo nunc genera aliquot?* These cases might be multiplied; they detract from the value of a work otherwise full of interest, and perhaps indispensable to every future student of Nonius.

R. ELLIS.

THE MANUFACTURE OF INSCRIPTIONS.

TO THE EDITOR OF THE ACADEMY.

SIR,—The organization in Jerusalem for the forgery of inscriptions, to which I have already, by your kind permission, referred (*Academy*, vol. iii. pp. 179, 180), would seem to be assuming larger dimensions. A stone, with twelve lines, which has lately been produced, is either in new characters (though some are Nabataean) or, more probably, is a forgery. But my special object in writing to you is to state that M. Shapira, the merchant, is not, as I conjectured, the deceiver, but the deceived. The doubts which I expressed as to his character arose partly from private enquiries and partly from the impressions received by myself and others in visits to Jerusalem. I have now the pleasure of informing you that these doubts are unjust to M. Shapira. According to the testimony of reputable persons in Jerusalem, such as the Bishop, who is staying at Basel, he was even honourable enough to refuse to sell a stone of (to him) doubtful genuineness except on the understanding that he should be free from blame should the inscription turn out to be spurious. It is to be hoped, however, that people in Jerusalem will bestir themselves to find out the real forgers. I regret not to have been better informed in the matter. Shapira, as a correspondent tells me, had already been three years a Christian when he came to Jerusalem.

A. SOCIN.

Basel, May 27, 1872.

Intelligence.

The 38th annual meeting of the Congrès scientifique de France, started and organized by the well-known archaeologist, M. de Caumont, is held at Saint-Brieuc, in Brittany, on the 1st of July and following days. The work of the Congrès is divided into five sections:—(1) Natural, physical, and mathematical sciences; (2) agriculture and useful arts; (3) anthropological and medical sciences; (4) history and archaeology; (5) philosophy, social economy, literature, and fine arts. Amongst the lectures which will take place, we may notice the two most interesting of the 4th and 5th sections: M. Morvat will give the complete collection of the Latin inscriptions discovered up to this time in Brittany (about forty-two in number, we believe), and will explain them—M. Morvat has already published, two years ago, very interesting *Études philologiques sur les Inscriptions gallo-romaines de Reunes* (Paris: Franck)—and M. Luzel will deliver a lecture on the authenticity of Breton popular ballads, and of M. de la Villemarque's *Barzaz-Breiz*.

At a meeting of the Society of Biblical Archaeology on June 4, Dr. Eisenlohr, of Heidelberg, communicated a paper on the religious and political revolution described in the Harris papyrus. He considered the latter to express the Egyptian view of the events which were the immediate cause of the Exodus. We are happy to add that this fine hieratic papyrus is probably on the point of being added, if it is not already added, to the national collection.

Contents of the Journals.

PHILOLOGUS, vol. xxxi. pt. 4.—M. Schmidt: On *Anonymus de Musica*, § 98. [Attempts to settle the rhythmical character of the examples given in this passage.]—Fr. Matz: H. Brunn's "Second Defence of the Pictures of Philostratus."—G. R. Sievers: On the History of Hero-dian. [A series of detached notes.]—K. Georges: Miscellaneous Obser-

vations.—D. Campe: Horace and Anacreon. [An investigation into the amount of imitation of Anacreon to be found in the Odes of Horace.]—K. E. Georges: *Τερψιχόρος*.—H. W. Schäfer: On the Circumference of the Earth according to the Ancients. [Examines the estimates connected with the names of Aristotle, Archimedes, Eratosthenes, and Posidonius. Rejects the notion that they were derived from Babylonian and Egyptian learning. The method of Eratosthenes was thoroughly correct, but it is impossible to say how nearly his result was so.]—L. Urlichs: On Eustathius.—N. Wecklein: The Aeschylean Literature of 1859–1871. [Supports the critics whose method depends wholly on the Medicean manuscripts and its scholia; also those who find symmetrical arrangement in speeches like those of the Seven against Thebes.]—H. S. Anton: Corn. Nepos, *Milt.* 8, 2.—F. W. Munscher: On Xenophon, *Anab.* iv. 8, 2.—On *Parta tueri*. [By several writers.]—Th. Wiedemann: Excursus on the Dissertation, "On the Age of Curtius Rufus." [Continued from last number.]

Zeitschrift für die österreichischen Gymnasien, vol. xxi. No. 10.—On the Concordia in Greek Syntax; by J. La Roche. [A valuable contribution to Greek grammar. The treatment of concords in Greek has usually been based upon the rules framed by Latin grammarians. The writer confines himself to the language of Homer and the early poets, e.g. Alcaeus: nor does he attempt to explain the peculiarities which present themselves. But nowhere can be found a fuller or better arranged digest of usages.]—H. B. Heller reviews a number of recent works on the *Oedipus Rex*.—No. 11.—Mähly: On Phaedrus. [Suggests various emendations.]—A. Conze, the well-known professor of archaeology at Vienna, gives a valuable notice of eighty-seven recent works on his subject. Perhaps his remarks upon Michaelis' *Parthenon*, and on Brunn's revolutionary *Problems in the History of Vase-painting*, are the most interesting.—W. Foerster reviews various recent editions of the *Oedipus Rex*.

Philologischer Anzeiger, vol. iv. No. 1.—Of the reviews of new works in this journal we may notice the following:—P. 42: C. W. on the third edition of Schömann's *Greek Antiquities*. [Suggests a few slight points which have escaped the aged author, who in most cases is thoroughly abreast of the latest investigations.]—P. 46: Review of C. Triebner's *Enquiries into the History of the Spartan Constitution*.—P. 50: Review by R. E. of Michaelis' *Parthenon*. [Warm and discriminating praise of this admirable work.]—No. 2.—P. 69: C. Liebold reviews Volquardsen, *On the Mythus in Plato*. [Good; especially for the digest of previous enquiry into the same subject.]—Review of Professor Ramsay's edition of the *Mostellaria*. [Unfavourable.]—No. 3.—P. 120: Review by A. H. of Blass' edition of Antiphon and of Dinarchus, in the Teubner series of texts. [Laudatory.]—P. 140: A. Forbiger's *Hellas and Rome* (a popular representation of public and domestic life of the Greeks and Romans); pt. 1, Rome in the Time of the Antonines. Reviewed by O. [Compared quite unfavourably with Becker's well-known *Charicles* and *Gallus*.]—No. 4.—P. 180: W. reviews Merkel's edition of the Laurentian MS. of Aeschylus; printed at the Clarendon Press. [Fully appreciates the value of this fine work.]—A. Philippi, *Contributions to a History of Athenian Citizenship*; reviewed by H. Frohberger. [Justly recommends this interesting essay to all students of Greek and Roman history as original and correct in its main views, fairly exhaustive in its reference to authorities, although occasionally too polemical in tone.]

The Pandit, vol. vi. No. 72.—The *Śabdakhaṇḍa* of the Chintāmani, with a comment (continued).—*Brahmātmāṇīśabdhāshya*. [Adhyāya I. pada 1, sūtras 1–18.]—Rājaśekhara's drama *Viddhādabhāṣṭi* (continued).—Sanskrit text and English translation of the *Vidyāvanmanoranjini*; a commentary on Sadānanda's *Vedāntasbra*, by Rāmatīrtha (continued; by A. E. G. and G. D.).—Supplement: Catalogue of Sanskrit Manuscripts (continued; vols. 72–75 of the *Dharmapādras*.)

New Publications.

BAR HEBRAEUS. *Oeuvres grammaticales*, éditées par l'abbé Martin. 2 vols. Paris.

KONZE, J. *De Dictione Lycophronis Alexandrinae aetatis poetarum*. Münster: Regensberg.

MÜLLER, F. M. *Ueb. die Resultate der Sprachwissenschaft*. Strassburg: Trübner.

PERSIUS, The Satires of. With a Translation and Commentary by J. Conington: to which is prefixed a Lecture on the Life and Writings of Persius. Ed. by H. Nettleship. Clarendon Press.

PLATH, J. H. *Die vier grossen chinesischen Encyclopaedien der k. bayerischen Staatsbibliothek*. I. Der *Wen-hien-thung-Khao* von Ma-tuan-lin. München: Franz.

TISCHENDORF, C. *Testamentum Novum Graece*. Editio critica minor ex VIII majore desumpta. I. Hälfte. Leipzig: Mendelssohn.

ERRATUM IN NO. 50.

P. 228 (e), line 41, for "sunny" read "snowy."

THE ACADEMY.

"INTER SILVAS ACADEMI QUARRERE VERUM."

Vol. III.—No. 52.

Readers are reminded that the mention of New Books, Articles, &c., in our lists is intended as a guarantee of their importance. The Editor of THE ACADEMY cannot undertake to return communications which are not asked for. The next number will be published on Thursday, August 1, and Advertisements should be sent in by July 29.

General Literature.

Lamartine. *Sa Vie littéraire et politique.* Par Ch. de Mazade. Didier.

Twenty-five Years of my Life, and Memoirs of my Mother. By Alphonse de Lamartine. Translated by Lady Herbert. Two Volumes. Bentley.

FOR thirty years, from 1820 to 1850, if the suffrages of the reading public in France had been taken, an overwhelming majority would have placed Lamartine at the head of the list of living authors; and the result would not have been very widely different if the votes had been weighed instead of counted, for though there were some writers who had a following of more enthusiastic admirers, each of these had also a body of influential opponents; Lamartine was at once the favourite of the masses, and at worst coldly esteemed or gently satirized by the extreme factions in literature. As Louis Blanc said of him in 1849—it was meant as an accusation—"he had not the art of making mortal enemies," and it is only mortal enemies who defeat their own purpose by embalming their adversaries in their best invective. At the present day Lamartine is the type of a past rather than an unpopular fashion: he is forgotten without being disliked. But a man who occupied at first so much and then so little space in the eyes of his contemporaries deserves to be studied at least as a man, if not as a writer, for the more insignificant he appears in that character the more need there is to explain the personal ascendancy by which he imposed on the world. M. Charles de Mazade's little book, his contribution to the *Revue des deux Mondes* during the siege of Paris, comes opportunely to invite the sober, critical judgment to pronounce itself once before the author of the *Méditations*, of *Jocelyn*, and of the *Histoire des Girondins*, is silently shelved amongst the second-rate, or the sixth-rate, classics of French literature. M. de Mazade does not bestow much thought on the question whether Lamartine is a real poet at all; that, like most of his countrymen, he is still disposed to take for granted; but he counts the vagaries of the spoilt child of fortune and society as so much on the wrong side of the balance-sheet of fame; he makes the poet responsible for the failures of the politician, the inaccuracies of the historian, but he omits to derive confirmation—which is scarcely, however, superfluous—of the reality of Lamartine's imaginative inspiration from the fact that he had neither judgment, learning, nor character enough to enable him to play all or even one of the parts in which he did as a fact make a not inconsiderable appearance. It may seem to be a distinction without a difference, but we are inclined, instead of blaming the poet for all that the man was not, to give the poet credit for all that he was; instead of saying: *Le Lac* is good poetry, but its author is "only a poet," or he would have saved society in 1848, we should say: the author of *Le*

VOL. III.—NO. 52.

Crucifix must be a poet after all, for he conjured the spirit of anarchy for a day, with no help save from a few abstract principles, by the might of which he floated during three months in the van of a liberal revolution, for which he had otherwise no natural affinity or inherited sympathy. On the other hand, it is certainly a fault or a weakness in the poet, as poet, that the elevated ideal character which he half wished to be, half thought he was, required to be rounded and completed by qualities and glories of an extra-poetical nature.

In this respect Lamartine was a victim to the literary tendencies of his time, to the taste for sentimental introspection which made it a condition of popularity that poetry must be not merely good in itself, but must contain the very soul and marrow of the poet, his whole subjective consciousness, the most intimate experiences of his heart. It is not, of course, altogether unreasonable to expect that a great poet shall have a great soul; but, after all, the man and his work are necessarily distinct, and the attempt to confound and identify the two is answerable for what seems to us theatrical and insincere in Goethe, Byron, and, on a smaller scale, in Lamartine. They acted well, but they acted at an audience which was not precisely immortal, and so far they put their memory at the mercy of a stage tradition; their importance was partly historical instead of purely artistic. For Goethe and Byron there was compensation; the former almost succeeded in resuming in his own poetical autobiography (forming the greater part of his works), the intellectual and moral life of two generations; and Byron, whose genius was naturally objective, gained rather than lost in the richness and power, with which he represented his one hero's figure relieved against a background of the finest scenery in southern Europe, from the belief, calamitous only to his friends and relations, that it was incumbent on him in private life to approach as far as possible to the ideal creation of his fancy. With Lamartine the case was different. The volume of *Méditations poétiques*, which obtained a brilliant success in 1820, the poet being then twenty-nine, was an innovation in form rather than in matter. To love like St. Preux, to weep like Werther, and to accept the consolations of religion like René, was not an original programme, but to do each and all of these in flowing, harmonious verse, which was "like neither Delille, nor Luce de Lancival, nor Esménard"—the popular authors whom his publisher advised the young Lamartine to study—was to do something which had not then been done in France, and, as it proved, to secure a reputation which, as reputations go, cannot be called undeserved.

M. de Mazade says of him that he transforms into poetry the sentiments which women and children share with men. In other words, he is the poet of emotional mediocrity; his muse satisfies the aspirations of the many simple souls to whom a rudimentary art has become a second nature, and whose sentiments are scarcely more complicated than if they were primitive, though their vigour has been much attenuated in passing into the conventional mould. The beauties of uncultivated nature were a new discovery to the generation which preceded Lamartine, and to his contemporaries there was still something new in the idea of a natural, intimate harmony between the moods of man and the changes of the outer world. Lamartine had a more than commonly vivid sense of the resemblance between life and a water-course, between falling leaves and fading hopes, between lovers' tears and the dew of heaven, between birth and death and night and morning, and in general of the analogy between material and spiritual existence. Melancholy without despair, hope without enthusiasm, tenderness

without passion, piety without intolerance, loyalty for the king and loving words for the people—it was the *juste milieu* itself incarnate in rhymes, which were not incorrect nearly so often as the Orleanists tried to make out.*

His ideas were never profound, and twenty years was more than long enough for them to become commonplace, as the speculative parts of *In Memoriam* and *Locksley Hall* are commonplace now; but "commonplace" only means that the opinion is too familiar, the truth too obvious, to be worth stating. And this is scarcely a reproach to a poet, since art should deal with the eternal and immortal verities, and a truism is as good as a truth if it can carry off as rich a lyrical disguise. Granting that Lamartine's themes are trite, and his treatment of them somewhat monotonous, it is just the oldest stories which bear repetition best, because their application is being always renewed; subjects of perennial interest carry their recommendation in the reader's consciousness, and he neither expects nor wishes to be told of emotions he cannot share. The emotions which everyone knows by sight, or a closer experience, inspire Lamartine's lyrics, and though the delicate excellencies of the most refined French poetry are apt to escape the dull perceptions of a foreigner, the readers of Lamartine will be struck by a something which evaporates in paraphrase or translation, the aroma rather than the bodily presence of poetry, like a spirited variation on a stupid air, which almost disguises the intrinsic meagreness of the melody; in fact, by the presence of those merits of poetical style which almost any one can feel, though it takes a Sainte-Beuve to analyse and describe them, and which suffice to make a few admirable poems, though they do not alone make a really great poet. In Lamartine there was a possible Herrick *doublé* with an actual Cowper, and the combination did not prevent his writing some lyrical pieces neither too long nor too ambitious to be perfectly finished and satisfactory works of art. Here his misfortunes begin. There are many immortal poems, including the best anonymous songs, which are the works of men who, under the most favourable circumstances, would never have been anything but what are called minor poets. The neglect of this truth in the early days of the romantic movement was the cause of grievous disappointment and disenchantment to authors who had the misfortune to outlive a premature celebrity. To write a good stanza, a man must be a great poet, and once a poet, always and altogether a poet; at least so it seemed to Lamartine and the readers of the *Méditations*.

"Aimer, prier, chanter, voilà toute ma vie,"

he observes in the character of *Le Poète mourant*: and two-thirds of the task presented no appreciable difficulties: he had really been in love with the lady he calls Elvire, the Julie of *Raphaël*, and the best proof of his sincerity is that in his most senile *Confidences* he never gave her name to the public; but even without such a personal source of inspiration he might have sung the resigned sighs of a conventional lover as successfully as the religious aspirations which a conventional mother instils into the candid soul of a conventional child. In these cases he is only indirectly concerned in the sentiments he expresses, but the third part of his life is song, and here perforce the subject and object melt into one. The poet, that is to say, Lamartine, loves, prays, and sings, and his song is the record of his life, but his loves and prayers may be past, future, or altogether

* Madame de Genlis was one of Lamartine's severest critics; but then Lamartine's maternal grandmother had been under-governess to the children of the Duke of Orleans, and she was employed to counteract the influence of Madame de Genlis, and bring Mademoiselle d'Orléans back from Spain when the "Orleans party" was intriguing with Dumouriez.

imaginary, whereas it is an indubitable historical fact that he composes verses, for they are printed in many editions. The poet is the hero of his own poetry, and if he has not a commanding individuality like Goethe, and cannot like Byron originate an ideal type—inventing it first and imitating it afterwards—he is reduced to celebrating a conventional poet, and compelled to spend his days in considering what course of conduct the eternal fitness of things prescribes to the greatest poet of the age.

This preoccupation had a twofold effect upon Lamartine: it modified his poetry and it modified his life. The naïve self-conceit which is so amusingly satirized in Alfred de Musset's *Conte, Le Merle Blanc*, is partly accounted for by the fact that two characters, he himself and an ideal poet, were inexplicably confounded in his poetical soliloquies, so that the beautiful locks and limpid eyes which might be harmlessly attributed to the one, often gave a drolly egotistical look to descriptions of the other. And this was not the worst; when he had exhausted the subjects for occasional verse which presented themselves spontaneously, he felt obliged to conceive the plan of a great work, concerning which it is sufficient to say that, while *Jocelyn* formed one book or episode of it, *La Chute d'un Ange* formed another. Lamartine had the pen of a ready writer, and he was quite capable of enriching the world with the remaining twenty-two volumes demanded by his scheme if he had not contracted other engagements, also at the bidding of his ideal self. For this superhuman moral epic, even if it had been written, would have been at most a literary monument, and the hero-poet, according to him, has a threefold mission. From his earliest youth, he tells us, he had traced out in advance the programme of his life: his youth was to be devoted to poetry; a history, vast, philosophical, tragical, a history in the style of Tacitus, was to employ his mature age; and then with advancing years he was to plunge resolutely into the *mélée* of practical politics and immortalise himself, either at the head of armies or—at the Hôtel de Ville. It is true that Lamartine, as M. de Mazade observes, was one of the men who possess in the highest degree "la faculté de l'inexactitude," and this account of his youthful aspirations, written when he was no longer young, is naturally somewhat coloured by the memory of intervening occurrences. But the romance is founded on fact, for besides the prophecies of his coming political greatness put into the mouth of Lady Hester Stanhope, in the *Voyage en Orient*, published at the beginning of his parliamentary life, as early as 1830 on his reception at the Academy, he had described the man of coming emergencies—orator, counsellor, poet—in terms which, with a speaker like Lamartine, can only be understood as referring to himself. "Sainte-Beuve l'a dit, Lamartine, l'académicien de 1830, prophétisait le Lamartine du gouvernement provisoire, avec cette nuance pourtant que certainement Lamartine avait fait ce qu'il avait pu pour que sa prophétie ne restât pas un vain mot." And this is exactly what spoils the sublimity of his rôle. Some are born great, some achieve greatness, but Lamartine was ever thrusting greatness upon himself, and an ideal of greatness constructed *a priori* by fixed principles and symmetrical rules, is wanting in one of the first conditions of poetical beauty, spontaneity.

Yet, even in politics, he is something more than a mere man of talent, though he is that as well. Where his personal vanity did not come into play, he had generous instincts and sound intuitions, and he was often unjustly judged because this or that party interest, which expected to find a tool in the poet, was baffled by encountering instead a somewhat doctrinaire statesman. M. de Mazade seems to do at once rather more and rather less than justice to

Lamartine as a politician. That is to say, he tries him by the highest standard, and makes it almost an accusation that, tried by that standard, his career was not a success. But if we refuse to take Lamartine at his own valuation as the "homme d'élite" predestined to be at once the Homer and the Moses of a new liberal-romantic Israel, his failure was by no means absolute, and very far from disgraceful. All men but the very greatest are measured by their contemporaries. For fault of better, Thiers and Guizot were the Pitt and Fox of the monarchy of July; nature intended Lamartine for the Burke. In 1848 he raised a laugh in the chambre by the incautious expression, "En politique, Messieurs, j'ai beaucoup voyagé." The phrase was characteristic of the man, who, with all his desire to *pose* in the most becoming attitudes, really meant to be candid, and by unintentional self-betrayal of this kind was actually much more candid than he knew of. But his political "travels" only ranged from one disinterested and unpractical conception to another. As a legitimist and as a republican he took what seemed to be the most chivalrous side. The king is one against many, therefore there is something generous in undertaking his defence; but the people are weak, helpless, and oppressed, and to become the champion of the liberties of all is newer, less lucrative, and therefore even more generous. But his policy showed the same want of original vigour as his verses. His opinions rested on sentiment or instinct, and he was unfit either to lead a party bound together by fixed pledges or to found one consisting exclusively of personal adherents who would be content with a policy based on the character of their chief. When he was elected deputy for Dunkerque and asked where he should sit in the chamber, he replied: In the ceiling, for there was no room for him in any of the existing parties. And this was perfectly true, for he had not the practical experience of statesmanship required of the man who is to direct a majority in times of peace, while he was without fixed principles or aims to inspire a consistent opposition. If the parliamentary conflicts of the reign of Louis-Philippe had related more to measures than to men, Lamartine would have been an intelligent but erratic critic, an uncertain but a conscientious ally, and he would have gained in importance by occupying a definite position as a liberal freelance. But for this it would have been requisite that Thiers and Guizot should each have had something that could pass for a policy, and had that been so, it would not have been left to Lamartine to determine the government of France on the evening of the revolution. M. de Mazade naturally looks at 1848 by the light of 1871, and tacitly suggests a parallel between Lamartine and the present *chef du pouvoir exécutif*, of which the effect is to blame Lamartine, since he could not establish a popular republic, for not having instead proclaimed a regency or a dictatorship. But this is doing injustice to his one political accomplishment, a Cassandra-like insight. He was more constant in his antipathies than in his loves, though he had two of each. The divine right of the Bourbons to the throne and the divine right of the people to liberty claimed his allegiance in turn, but Napoleon and the Orléanists were double-dyed usurpers, inasmuch as they sacrificed liberty without an extenuating pedigree. If the mother and child that implored his protection in 1848 had been of the elder branch, it would have been the crowning moment of his life as he knelt to offer his homage, but he justly felt it would be absurd to sacrifice the cause of the people—and his own popularity—for the sake of "la royauté illégitime d'Orléans."

He was equally well advised in rejecting the other part offered him, though the motives which actuated him at the time are less obvious, so that we may, if we please, give a

moment of poetic inspiration credit for the forbearance which certainly did not arise from self-distrust. It is easy to exaggerate the importance of Lamartine's share in the revolution of February; he himself gives us every encouragement to do so; but the sudden and unprovoked collapse of his popularity shows us how hollow and insecure it must have been from the first. The revolution which he represented—for a French revolution is never one and indivisible—was sentimental, literary, Girondist, middle-class, but the vast majority of the middle classes cared as little for the republic then as now, and it was not thrust upon them by the same imperative political exigencies. The strength of the revolution was in the street, but Lamartine was powerless amongst the crossing factions and neutralised by the rising celebrities that he encountered there. There was Blanqui and a band of conspirators for the sake of it, the advocates of revolution *en permanence*, i.e. any government that a day at the barricades could upset; there was the democratic and social republic, the dream of the honest working classes and their heroes, Barbès, Albert and Louis Blanc; behind these there was the red revolution, which took its leaders day by day from the malcontents of the other factions, and depended for its strength in the last resort upon what Louis Blanc had described long before, the great *armée du mal*, consisting of all those who have been reduced by vice to misery, or by misery to vice. (In the days of June its effective strength was estimated at 40,000.) Then there was the Bonapartist faction, which had intelligences amongst the conspirators, and especially amongst the reds, where Louis Napoleon seems to have played the same mysterious and disastrous part as Égalité in the first revolution. And when we add to these all the shades of reaction throughout the country, we can judge what chance a moderate, aristocratic liberal like Lamartine would have had of establishing himself as dictator, even supposing he had known what to do next. It is true that for a moment, owing to the fears of the reaction and the prudence of the republicans, Lamartine's name, as the symbol of compromise, united 259,000 votes in Paris alone; but only six weeks later, that is, at the beginning of June, the list of popular favourites was headed by Caussidière, the ex-prefect of police, with 147,000 votes, while Lamartine was nowhere with Ledru-Rollin. The man who had no enemies had no friends, and it is on the whole well for his reputation that either vanity or a worthier motive made him refuse to become the tool of interests and ambitions not his own. He retired into private life with his head on his shoulders, with clean hands, and with the recollection of half a dozen moments when he had prevailed with a passionate, puzzle-headed mob to forget that it was hungry and angry, and to fancy that the happiness which, more or less consciously, it was clamouring to receive from the state, consisted in conscious virtue, the admiration of Europe, and the privilege of embracing an eminent poet and historian on both cheeks. During his tenure of power his summary of a day's work used to be, "Je viens de faire cent discours et d'embrasser cent mille hommes!" and after all there must be good in a mob that can be pacified with a fraternal kiss and fine words. Of course more than this is needed to govern a country, but Goethe did not exactly govern Weimar, nor Byron, Greece. And though we have a right to smile at the disproportionate pleasure which Lamartine certainly derived from the accessories of his popularity, his critics are not altogether blameless for the state of things which stimulates such vanity as his. We are too curious in our hero-worship: a mere Washington or Pitt we should think humdrum and commonplace, and yet when a Lamartine at the Hôtel de Ville enters into the spirit of our secret cravings and the impromptu *coup de*

théâtre proves a complete success, we are so unreasonable as to complain because, after all, it is—theatrical.

Of Lamartine's old age the less said the better; he wrote for money, and he wrote about himself and his own urgent need for money to avoid the painful necessity of selling the natal soil about which his readers knew so much. What he wrote had little to recommend it, except a slender biographical interest and "cette intarissable et harmonieuse parole" which unfortunately Lady Herbert has not succeeded in reproducing. The *Twenty-five Years of my Life* go over the same ground as the *Confidences*, but are in places a little fuller; for instance, they reveal that Graziella was really a cigar-maker, not a coral-worker, as falsely represented in the romance. But in other respects they are no more accurate or authentic than his other auto-biographical writings. Some of his statements can be checked from the Memoirs of his mother, or extracts from her journal published with the *Life*; for instance, it appears that it was in 1819, not, as he describes, during the Hundred Days, that he lodged in an uninhabited fisherman's hut on Lake Leman with no society save a stray dog and the fisherman's daughter. In Lady Herbert's English, Madame de Lamartine is almost more readable than her son. She was a woman of fine character and some genius, which, however, seldom found its expression on paper, for the journal which she kept regularly was a mere record of domestic affairs, pious resolutions, and ultimately matrimonial negotiations for her daughters. In external circumstances her life was very like that of Eugénie de Guérin, but the care for a whole family, of which Alphonse was one, gives more breadth and variety to the parts of human interest, though on the other hand there is much less of sentiment and poetical reverie in the matron. Another point in which she corrects and supplements her son's reminiscences relates to his first volume of poems. Twenty copies of his *Méditations poétiques*, privately printed and circulated amongst friends, had procured him a considerable drawing-room reputation which preceded by a year and no doubt materially furthered the success of the published volume.

H. LAWRENNY.

LITERARY NOTES.

The *Westminster Review* for July contains an interesting article on the Greek lyric poets, characterising with great delicacy and precision the Aeolic school of subjective passion and the Doric school of choral harmony. The writer points out that the latter, though developed within the sphere of Dorian civilisation, was not worked out by Dorian poets. Aeolian passion and Ionic sentiment took possession of the Doric chants, of which the words had previously been bald, childish, and empty, and worked them out into a magnificent literature. The article closes with a rather severe appreciation of Simonides and his successor, Bacchylides, both of whom are considered as somewhat mechanical artists. Pindar is reserved for a separate study.

Under the title, "Eine verjäherte Mystification," Th. Creizenach furnishes the *Allgemeine Zeitung* (July 4) with a very curious illustration of the danger of taking history from newspapers. In the autumn of 1814 Goethe paid two short visits to his native town, and on the last of these occasions, according to both Viehoff and Lewes, a solemn representation of *Tasso* was prepared in his honour. His box at the theatre was hung with garlands, and he himself was crowned with wreaths taken from the busts of Virgil and Ariosto; it was an ovation like that of Voltaire at the Théâtre Français. We are now assured that there is not a particle of truth in the whole story; on the contrary, Goethe visited Frankfort, and so little honour was shown him in his own country that, to put the town authorities to shame, an enthusiastic admirer of his, Privy Councillor Willemer, invented, wrote, and sent to the *Morgenblatt* (September 28, 1814) a circumstantial account of all that ought to have taken place

at the theatre, but did not. The report was printed in good faith and copied by other journals. The *Morgenblatt* discovered its mistake, and spoke of the forgery (December 31) as an ingenious and successful joke; but, as often happens, the contradiction failed to reach those who had believed and helped to disseminate the false news.

Paul Stapfer, in the *Bibliothèque universelle et Revue suisse*, hazards the opinion that, of all the contemporary historians of France, M. Guizot is the only one possessing a thoroughly healthy mind, sound and happy like an ancient classic. His *Histoire de France racontée à mes petits enfants* illustrates his impartiality and breadth of view, while there is more grace and picturesqueness than in the works of his youth and maturity.

The *British Quarterly* has an interesting article—though written too expressly from a Protestant point of view to be strictly scientific—of William of Occam and his connection with the Reformation. The reviewer considers Occam's originality, though not his influence and importance, to be somewhat overrated: regarding him rather as "the great English schoolman, less qualified to invent theories than to combine and apply to practical use principles already enunciated." Thus he did not so much revive or develop nominalism as popularise it by associating it with the current doctrines of the Byzantine logic (of Psellus). Nor is his theological scepticism, or rather criticism, properly original: he adopted from others the mystical position that the truth of the dogmas is apprehended by faith and not rationally demonstrable: but he deprived this mode of apprehension of its exceptional and hypermystical character by exhibiting it in harmony with his general theory of knowledge: according to which all scientific propositions inadequately represented the truths of intuition, though in theology the inadequacy was greatest. The clear vigour of Occam's anti-papal polemic the reviewer attributes to the union in him of an earnest though moderate mysticism with a practical nominalism. Other writers have attributed to realism a powerful influence in creating and perpetuating the ideas of pope and emperor as the most perfect concrete expressions of civil and spiritual power: here, it is argued, we see nominalism leading to the demand that the symbol should *adequately* represent the thing symbolized, and so to the attack on the pope as a false representation of Christ's sovereignty.

Art and Archaeology.

Photographs of the Acropolis at Athens. By W. J. Stillman. Taken with Dallmeyer Lenses. Marion and Co.

A HANDSOME portfolio of twenty-six photographs by Mr. W. J. Stillman will be appreciated by those who have had the happiness to visit the Acropolis of Athens—may go no little way to console others who are now out of hope to do so—they may hasten the more fortunate who have still time and opportunities before them. Well chosen general views give first (5) the northern and most extended aspect of the hill of Athene, confronted boldly by the lower but hardly less renowned hill of Ares—"Mars' Hill"—the Areopagus, and new Athens that the traveller has to endure, below. We move to the right, and in No. 3 the height crowned by the memorial of obtrusive Philopappus becomes visible intermediately in the distance, and now the old Turkish town is before us; a wider detour brings us in No. 4 to the south-east of the Acropolis and the banks of the Ilissus, and Philopappus is now away to our left; the Parthenon nearer to the edge of its enclosure on this side rises clear against the sky, on the slope below it is the great theatre, and on the plain the columns of Jupiter Olympius are brought into view to complete a scene that satisfies the eye by its composition, but can never satiate imagination.

These three views of Athens give the complete circuit of the Acropolis, and combine picturesqueness with an adequate expression of relative distances and magnitude which is far from detracting from the value of the monuments.

From the last general view we can see one direct path to the newly excavated Dionysiac theatre (No. 2); above it are the ruins of the Choragic monument, from the summit of which the seated Dionysus, now in the British Museum, looked down on his own theatre; there the beautiful marble chair is still in its place, from which, as we learn by the inscription on it, the priest of Dionysus Eleutherius was a spectator as his god was exhibited breaking the vain bonds of Pentheus and asserting the rights of exalted enthusiasm; or struggling out of a shabby scrape in Hades by now blustering in the disguise of Hercules, now cringing in that of a slave and appealing to his priest among the audience by name to help him as a boon companion in trouble (*Arist. Frogs*).

After a view of a rudely regular entrance to the Acropolis of Roman adjustment (No. 1), recovered by excavations of Beulé, we pass in (No. 6) to the foot of the ascent—once so majestic, now strewn with the ruins of steps and colonnade—the pedestal of Agrippa, the mediaeval watch-tower on either side jostling Attic art and Attic glory; one front of the re-erected naos of Victory without wings is shown on the right—seen more completely in No. 7—in both a symbol of the irony of fate, and yet in a sense an assertion of a tenacity of renown not desperate even yet.

Passing through what once was the western portico and the noble central doorway in the wall that once closed the sacred precinct, we are (No. 8) in the eastern portico of the Propylaea, of which the columns, though shaken, are at least erect. One effect of the shifting of the drums by earthquakes has been to exhibit more distinctly than in other cases their heights and divisions. We observe, in consequence, that in this work of Mnesides they are unusually numerous—as many as ten in a column of only 25 feet high, against no more than eleven in the Parthenon shaft of 33 feet. The lines of the beds also that are studiously set by Ictinus at different heights in adjacent columns are seen here to rule through the entire hexastyle.

Of the other photographs, five are devoted to the Erechtheum, nine to architectural subjects of the Parthenon, and three to sculptural. Nos. 9 and 18 give the east and west fronts of the Parthenon, with sufficient foreground to convey the proportion of the structure to the circumjacent area; and in No. 17 the eastern is represented again nearer at hand, for the sake of details. Nos. 11, 14, and 13 give views of the cella east and west and northern ambulatory looking west; No. 15 the interior of the portico below; and No. 12, as seen from above—an originally selected view, showing the sculptured frieze that still remains in position and details of construction; the protected and weathered surfaces and peculiar cleavage and fracture of Pentelic marble are given with surprising reality.

Taken altogether, we would scarcely desire a series of photographs to more completely represent the dignity and refinement, the scale and harmony, of the Parthenon and its surroundings. Peculiar interest attaches to photograph 16, which presents the "Profile of Eastern Façade showing the Curvature of the Stylobate"; that is to say, the intentional and studied variation of the lines of the steps from true horizontality—perhaps the most remarkable of the numerous adjustments that the Greek architect imposed upon himself for the sake of countervailing certain slight distortions produced to the eye by contrast of lines. That such was their practice had been read in both Greek and Latin authorities, though the fact was only half believed, the statement perhaps only half understood, until recently verified by the monuments. The publication of Mr. Penrose's minute survey of the Parthenon by the Society of Dilettanti left but sorry excuse for doubt thereafter, though perhaps we have no

right to wonder that the evidence should wait in vain for recognition from architects over-occupied or from theorists committed to the supreme value of zeal however blind no matter—of thought estimated by some gauge irrespective of mastery of the art of effective thinking, or, lastly and latest, of the spontaneous evolution of genius from the crude handicrafts.

The existing fact concurs with the ancient averment, that the Greek observed that architectural lines in certain collocations however truly horizontal in construction failed to appear so to the eye, and therefore intentionally, though at the cost of infinite adjustments, constructed them on a curve to correct the illusion and render them horizontal in appearance. The principle may be illustrated on the smallest scale, and is still more salient to observation in the largest. Inscribe a square within a circle, and the accuracy of the circle seems impaired; it is difficult to regard it as other than a set of segments that would intersect if continued at the angles of the square. By close observation the distortion proves to be shared between the curve and the right line that subtends it; the bow is exaggerated, the straight line sags—dips towards the middle. By a due series of experiments it is found that lines meeting or tending to meet at an angle have their apparent divergence modified; acute angles appear more open, and obtuse less so—the eye in each case approximates the divergence to a right angle. The same occurs therefore in the contrast of an inclined with a vertical line, and had its due acknowledgment from the Greek when he inclined forward the face of an anta that was seen in combination with a column. The difference may be slight, so is that between a sharp note and a flat to some ears; the eye of a Greek, even though not an architect, seems to have been quite as sensitive as the ear of an opera conductor.

There can be no doubt that Mr. Penrose is correct as against Vitruvius in arguing that in the front of a Greek temple the primary compensation was demanded—not on the stylobate, but by the contrast of the raking lines of the pediment with the horizontal cornice—the curvature of the stylobate following in great part as a consequence, though also required independently to countervail the strong contrast of the inclined outline of the angle columns. Abundant exercise for these observations may be found, at least in clear weather, without quitting London, in buildings of all styles. A modern Gothic spire neighboured ill-advisedly by the slope of a high-pitched roof, would seem to have its axis deflected from the perpendicular. Look from the Green Park at the segmental hoods of windows of Bridgewater House that drop on outer ledges of cornice, and these will be seen to turn up visibly like the brim of a hat; the seeming sinking of the cornice was in some degree relieved by the varied lines of sculptured groups, as we may observe in the pediment of the British Museum, but the optical disturbance still is unsubdued.

The stylobate and the cornice must needs be made to appear parallel, and thus the application of the artifice to one would in any case affect—involve—the other. The edges of the steps and the lines of the entablature, usually understood to be straight lines, are therefore in the Parthenon and some other of the best examples of Greek Doric convex curves lying in vertical planes, or, strictly, are composed of straight sides of large polygons, giving approximation to a curve more or less easy according to the number of sides. The front architrave of the Parthenon is composed of only seven stones with six intermediate joints, giving angles that would touch points in a very large circle; the stylobate as composed of twenty-one pieces, or at least of fifteen sets, gives a polygon of more sides; the joints under the two

central columns out of eight are perpendicular; those under the adjacent columns north and south are inclined north and south respectively—coincide, in fact, with radii of the large circle of the general curve. These adjustments are brought out still more palpably by Mr. Penrose's measurements of the lower drums of the columns, which are worked with extremest accuracy, and show the differences in height on opposite sides that must ensue from their lower beds being effectively on a slope.

The total rise above a level line joining the angles of the top step is 0·228 of a foot, or as nearly as may be 2½ inches. The photograph 16 is taken in very quick perspective, with an horizon at about the level of the second or middle step, and by the rapid foreshortening the rise from the angle to the centre of the steps—required, in the words of Vitruvius, to prevent the line seeming sunk like the bed of a channel—becomes distinctly observable.

We have here a palpable illustration of the words of Mr. Penrose—"The amount of curvature is so exquisitely managed that it is not perceptible to a spectator standing opposite to the front, at least not until the eye has been educated by considerable study, founded on knowledge of the fact. It may indeed easily be remarked by any one who places his eye in such a position as to look along the lines of the step or entablature from end to end."

"Greek art," says Dr. Thirlwall, "is the only art that perfectly satisfies the taste." That this should be so may seem less extraordinary when we appreciate what delicate sensibility and infinite study are implied in adaptations so minute as these, of which the very value depended on their eluding observation.

It is to be desired that some good opportunity may yet occur for investigating the application of these principles to Ionic architecture. The observations of Vitruvius upon them apply, in fact, to this style, and his term, *scamilli impares*, that seems to suit so exactly the "unequal stools" of the diversified lower drums just noticed, is applied by him to stones below the Ionic plinth, and modified for the purpose of effecting, in the first instance, rather than accommodating, the already established curvature. The Ionic temples which have been recovered by the Dilettanti Society since this problem was really appreciated have been too much disturbed by violence and earthquakes for their foundations to supply materials for comparison. Apart from an examination of the Erechtheum directed to the solution of this equally artistic and scientific problem, our hopes must turn to the support of Mr. Wood in his great discovery and the complete uncovering of the mighty podium and stylobate of Diana of the Ephesians.

W. WATKISS LLOYD.

History of Aesthetic. [*Aesthetik als Philosophie des Schönen und der Kunst.* Erster Band: Kritische Geschichte der Aesthetik von Plato bis auf die neueste Zeit. Von Dr. Max Schasler.] Nicolai'sche Verlagsbuchhandlung, 1871.

THE period of original speculation in Germany has long been passed, but the productive activity of the national mind has not ceased; it has but taken a fresh direction—it has turned to the labour of consolidating and methodizing the results which have previously been obtained. Throughout the eighteenth and nineteenth centuries a great variety of theories of art have been thrown up. These theories, which have been recreated or remodelled with every fresh turn taken by philosophical speculation, are scattered up and down the works of various writers, sometimes incorporated into the general systems of great philosophers, sometimes occurring in the detached essays of less known men. Dr.

Max Schasler comes in on all this mass of literature, and in the manner of an encyclopaedist reduces the whole to order. He begins with the beginning, *i.e.* with Plato, and carries us up to the latest moment of production. He is indeed not without claim, if not to an original theory, at least to an original point of view, but this will probably be found by readers to be of less value than his historical analysis.

The introductory chapter and the three books which contain this critical history of aesthetic are now before us. They form a complete work, independent of that Philosophy of the Beautiful and of Art which is announced to follow in connection. In the introductory chapter, Dr. Schasler suggests that the history of aesthetic may be divided into three great epochs. First, the period of intuitive (unsystematic) perception; secondly, the period of reasonable system; finally, the period of philosophical speculation. Ancient aesthetic is comprised in the first period; in the second is placed the aesthetic of the eighteenth century; and the third embraces the aesthetic of the nineteenth century up to the present time. In each period, Dr. Schasler again includes three subdivisions of unsystematic, systematic, and speculative treatment. These subdivisions seem to be not only unnecessary and confusing to the reader, but frequently oblige the author to force his facts to correspond to their situation.

After a brief notice of the precursors of Plato, Dr. Schasler proceeds to give full quotations and extracts from the various dialogues. The aesthetic of the Greeks, he says, in its first stage invariably subordinated the Beautiful to the Good. The justification of art lay, in so far as it was serviceable to the Good. Speaking in general terms, this was also the doctrine of Plato, and was carried to its extreme limit by the Cynic and Cyrenaic schools. The next stage commences with Aristotle. In opposition to the Platonic conception of mimesis as mere copying of nature, Aristotle employs the term in the sense of the embodying of the idea, and ranking as such far above reality, which is always more or less incomplete. Mimesis is the cause of the beautiful in art; katharsis its aim and operation. Katharsis is taken by Dr. Schasler in the sense of purifying the emotions, according to the old interpretation, and he does not seem to be aware that this interpretation has been challenged and made at least doubtful by Professor Bernays, who assigns to the expression a totally different meaning. With Plotinus, we enter on the final movement of the ancient period. This movement was based on the tenet of the Alexandrian school that the absolute idea, as the principle of all self-movement, was the source of all being. Plotinus conceives self-movement in respect of the beautiful as the objective embodiment of the ideal: he thus passes beyond the purely subjective signification of the Platonic mimesis, and beyond the Aristotelic limitation to mere artistic activity. For he attains to the higher conception of the objective embodiment in sense after the pattern of the idea. With Plotinus the beautiful is no longer reality to which art has given form, but the idea itself as embodied in reality. The vital element of all existence is the idea as the principle of form; this is the fundamental principle of Plotinus' aesthetic.

After the decay of the aesthetic of the ancients we have a blank of something like a thousand years, resulting from the total change of sentiment respecting art. In that division which marked the development of the middle-age spirit in contrast to the unity which distinguished the ancient, art was bound to spiritual content, and therefore always subservient. The aesthetic interest was absorbed by the theological. With the renaissance movement the yoke was cast off, and art freed went on its way; but not until it had, so to say, run through the whole domain of nature, did the want

arise for a theory of the then complete content. Here commences a new period in the history of aesthetic, which became possible towards the end of the seventeenth century, and the foundation of which was laid by Baumgarten in the middle of the eighteenth. The aesthetic of the English and French at that time, on account of its essentially unmethodical character, can only be regarded as popular, and precursor of the German. After Baumgarten came Winckelmann and Lessing, who freed aesthetic from the pedantic character which marked it under Baumgarten's hands; but it remained for the Kantian school to destroy the narrow limitation to the antique, and, turning criticism to reflection, to deduce speculatively the idea of the beautiful. Fichte gave but occasional attention to the question of art, the arts, and the beautiful, and his philosophy, resting on the principle of purely subjective idealism, was but ill adapted to form the basis of a system of aesthetic. The two Schlegels carried the principle to its fullest consequences, but Adam Müller must be taken as the chief representative of the romantic-aesthetic school. That he makes no sign of anything like real philosophical treatment of his subject is perhaps the best testimony that the romantic school, *i.e.* subjective idealism, had shown itself incapable of a scientific theory of aesthetic. Schelling accomplished the next step when in his *System of Transcendental Idealism* he developed and brought into play the principle of objective idealism. But in aesthetic, as in everything else, he eventually runs off into mere fantastic mysticism, and we find ourselves landed in *Gottesdienst* as the ideal drama. Solger, Krause, and Schleiermacher, without quitting the common basis, took up more important and individual positions, and formed the transition to Hegel. After all, even in the hands of Schleiermacher, objective idealism had not been fruitful as far as any essential advance in the theory of aesthetic was concerned. It had righted the balance between thinking and being in but a clumsy fashion, which left them still a distinct dualism; it remained for Hegel to bring them out of this position of mere polarization into identity. This was done when he proclaimed the Absolute identical source both of the world of nature and of spirit. From this standpoint might be achieved that exact scientific treatment which had before been impossible. Hegel has indeed done more for the subject of aesthetic than any one; and Dr. Schasler, though he fastens on certain evidences of defective method, and lays what seems an almost unnecessary stress on his want of acquaintance with the practical details of the domain of art, confesses that the aesthetic of Hegel is a vast treasure, full of pregnant thoughts and deep insight into the very essence of art. With Ruge, Rosenkranz, and Vischer, closes the list of those Hegelians who have specially busied themselves with aesthetic. Dr. Schasler then makes use of Herbart and Schopenhauer as representatives of a realistic reaction, and concludes by assigning to himself the task of attempting a fusion of the two opposing forces, idealism and realism, in so far as they affect the theory of the arts. This is to be done, he thinks, by taking as sole starting-point the abstract aesthetic idea, and ascertaining first that there exists in the human organism a concrete substratum corresponding to it. By this means, he says, will be avoided the vitiating defect of all previous systems, viz. that of starting from pure supposition. Thus closes the first volume, which contains the critical history of aesthetic; the philosophy is, we understand, already written, and will shortly appear in print.

It will be seen from the above that the desire to methodize and co-ordinate according to a preconceived scheme has somewhat fettered the author. The scheme has gradually become a sort of Procrustean bed. Giants are compressed

to fit it; dwarfs are stretched to fill it. Take, for instance, the position which Dr. Schasler assigns to Aristophanes, who, he says, with sound and healthy criticism swept away Platonic cobwebs, and was the precursor of Aristotle. Here the position is forced both critically and chronologically. Then, again, when we come to the modern school, we find undue weight attached to Herbart and Schopenhauer, simply because the scheme demands representatives of realism to set up over against the idealism of Hegel. But to that instinct for completeness and order which has forced the author to submit himself unquestioningly to his scheme is due also the admirable form of this book. In the perfection of method and arrangement, in the thoroughness of treatment, we recognise the same wonderful capacity for organization which distinguished the soldiers of Germany in the field, and which is here brought to bear in a department of literature in which it was seriously needed.

E. F. S. PATTISON.

Children in Italian and English Design. By Sidney Colvin. With Illustrations. Seeley, Jackson, and Co.

THIS eloquent essay, reprinted from the *Portfolio*, is a good specimen of that best and most legitimate sort of writing on art which has for its aim the adjustment of a special knowledge of artists and their work to the needs and interests of general culture. Its subject is the treatment of children by Blake, Stothard and Flaxman, as prominent examples of the temper and mode of work of a whole school of English artists three generations ago; and this gives the writer an opportunity of analysing the general characteristics of those three great designers in a very happy and interesting way. His object has been to show that "there exists what may be justly called a modern sentiment towards children and appreciation of them, in a sense in which no such novelty of sentiment or appreciation exists between grown-up people towards each other"; and again, "how that observant home-tenderness, that new, subtle and affectionate intimacy with children, of which Reynolds had first given signs in his portraits of them taken individually, had got to be part of the regular endowment of the age, and had sunk down even into the lightest incidental work and ornament in which its more finely gifted artists revealed their prevailing temper." Sir Joshua Reynolds, notwithstanding the wonderful variety and perfection of his delineation of childish character, is excluded, because in portrait-painting the general temper and sentiment of the artist are controlled by the exigencies of his special function and the necessity of dealing directly with the special and individual traits of the subject in hand; and what Mr. Colvin wishes to seize and analyse is a "type," a "mode of conceiving childhood generally"; and he rightly looks for this in "design of the independent or ideal kind," work which the artist "does out of his own head," like the designs in Blake's *Songs of Innocence* or Stothard's illustrations of books.

In the chapter on Blake, which is illustrated by two plates full of that peculiar mingling of sweetness and strangeness which characterise the work of this great artist, he dwells at length on the original of the *Songs of Innocence*, the text of which has been lately reprinted, bringing clearness into the bewildered beauties of that singular *mélange* of design and verse. Afterwards, illustrating what he says here, as in other parts of his book, by vignettes introduced with pleasant effect into the printed page, he defines a certain affinity between Stothard and Blake, two artists at first sight so incompatible or contrasted, lingering pleasantly over the *rapsorts* of Stothard with his time, and giving some interesting details on the early history of English engraving, showing

by many incidental indications and a well selected epithet here and there an unusual knowledge of that perplexed subject, the general history of English art; seeing these things always in close relation to the artists who produced them, and those artists themselves in close relation to their times. "Stothard's age," he says in a characteristic passage, "and its ways in England had enough charm in them to have become pleasantly ideal to us, in the sense in which it takes something more than mere lapse of time to make an age ideal; and he, like the stronger souls between whom we have set him, was a votary of the ideal within his age itself; he knows how to add the necessary touch, to accent or generalise the costume, to find grace in frilled shirts and large lappets, and knee-breeches and stockings, to sweeten and dignify the type, to group and harmonise the figures just within the fitting measure. And in his landscape and accessories he makes just the abstraction required by the pitch of the subject and the conditions of the scale and material. Stothard was a real student of outer nature both in general and detail (his tender passion for flowers is one of the prettiest things which Mrs. Bray, his daughter-in-law, tells about him in her *Life*); and his miniature landscapes of hill, lake, park, garden, and woodland, or cottage and thicket, have the elements which speak most directly to the quieter side of the landscape faculty in us."

And the same skill with which Mr. Colvin has struck upon the remote affinity between Stothard and Blake is shown in the passages in which, on the other hand, he distinguishes the qualities of Stothard from those of Flaxman—designers who have so much in common, and whose qualities for the superficial observer so easily fade into each other—thus discriminating admirably those three distinct faculties. "Unlike Stothard, Flaxman works in an atmosphere, above that of historical or romance associations, in which ancient and modern are reconciled under an almost identical ideal," presenting this ideal "in a mode which I have called architectonic," the limbs of his figures "being conceived as masses for adjustment in something like rigid geometrical or architectural figures." The frontispiece of the book is a design of Flaxman's photographed from an example in Mr. Colvin's own possession—a design quite monumental and grand, though worked out with a few simple lines and tints; and on page 46 he suggests in a few words altogether worthy of it what he thinks may be the meaning of this design.

And by way of further defining, through contrast, that exact phase of sentiment in the treatment of children by English artists which he wishes to discriminate and explain, he has prefixed some notices of the very different treatment of children by the Italians of the middle age and the Renaissance, artists who saw in children not their common human relations, but referred them "to other and more remote relations suggested by religion and imagination," looking for supernatural or symbolical types in them, so that "the burden of the supernatural which," as he well says, "is always in some degree the unnatural rests inevitably on all their delineation of them." Here too Mr. Colvin shows an equal knowledge and appreciation of a kind of art so different from that of England in the Georgian era, unravelling distinct threads of feeling here also, and showing how to a true culture workmen so far apart as these early Italians and those later Englishmen suggest no incompatible interests, but with full congruity lie easily enough together in that *House Beautiful* which the genuine and humanistic workmen of all ages, all those artists who have really felt and understood their work, are always building together for the human spirit.

It will be seen from what has been said that although this book is of no great length yet it ranges over a great

variety of subjects. And out of all this Mr. Colvin has untwisted with singular skill this one particular thread of the treatment of children, presenting only what he feels clearly and can present with true effect. Thus the little book has a real unity, touching on many diverse things, but kept together by its main thread, so that it might easily be expanded into a larger volume. Such work is only possible where there is great general knowledge of art. Instances of this general knowledge are everywhere scattered up and down this essay. Mr. Colvin gives us, for instance, by the way, on page 16, a clear characterisation of that obscure artist, Honoré Fragonard, and does an act of historical justice in passing. But this true knowledge in aesthetics is shown best of all by the impression he gives one that in passing over so many phases of art he seizes a fresh *nuance*, a fresh variety of impression and enjoyment from each; you feel that beyond mere knowledge, mere intellectual discrimination, each one of them is a distinct thing for him, and yields him a distinct savour.

WALTER H. PATER.

ART NOTES.

The incompetence of those persons who think themselves competent to furnish the public with translations from the German is as manifest as ever. Any one who has blundered through Schiller's *Thirty Years' War* and a couple of plays of Kotzebue's thinks himself qualified to translate every author on every subject. A flagrant example of this state of things is furnished by the translation of German essays which has been lately given to the world by Holzendorf and Virchow as the *German Quarterly Magazine*. The first number for 1872 contains, amongst other articles, one on Albrecht Dürer, by Dr. Hermann Grimm, the well-known author of the *Life of Michel Angelo*, whose *Select Essays* were recently reviewed in these pages (*Academy*, vol. iii. pp. 124, 125). Dr. Grimm had not the opportunity of seeing the translation before it appeared in print, and now—too late for alteration—he finds that not only is the entire essay badly translated, but that it is full of passages in which the author has been completely misunderstood, and has the most ridiculous and absurd statements put into his mouth. Here is one specimen: Dr. Grimm writes, "Deutschlands grosse Männer sind niemals gross gewesen durch das, was sie leisteten im engeren Sinne." This statement the translator gives us as "Germany's great men have never been narrow-minded." And after this fashion, on every page, occur some four or five bits of egregious nonsense. "One more perversion," says Dr. Grimm, in a letter now lying before us, "is especially annoying to me,"—"such an opinion upon Buckle, Englished in such an incomprehensible and incorrect fashion, that it is utterly impossible to make out from it what I intended to say."

The Berlin sculptor, Johannes Pfuhl, has just finished his colossal marble statue of Baron von Stein. The commission was bestowed on him about four years ago, when he obtained the first prize for his design in public competition. The statue has been exhibited to the public in the atelier, and was unveiled on July 9.

Dr. W. Rossmann, who is widely known by his talented book of travels, *Vom Gestade der Cyklopen und Sirenen*, has been named professor of art-history and aesthetics to the art-school in Weimar.

Some works undertaken in connection with the construction of a new street at Lucera have brought to light a statue of Venus, a marble vase, and portions of a mosaic pavement. The Venus is about seven hands high, and is undraped; at her feet are a child and a dolphin. The figure is broken, but no piece is wanting, and the Italian papers speak of it as good work, without assigning any date. The vase bears the inscription: "Divo Commodo." The authorities have undertaken to carry on the excavations, and there is every likelihood of their being richly rewarded, for Lucera is the ancient Luria, and the soil teems

with antiquities. The chief ornaments of the cathedral itself (originally a mosque built by the Saracens) are the columns of *verd antique*, which come from the temple of Apollo once standing on the same site. Many pieces of sculpture and Roman inscriptions have already been found within the area of the ruined castle, which stands about a quarter of a mile distant from the city itself.

An interesting contribution to the literature of household art has recently appeared in *Felix Lay's Südslavische Ornamente*. The book is published by Fischbach in Hanau, and contains twenty careful chromolithographs of carpets, needlework, articles of jewellery, &c., all of South Slavonian design, and is accompanied by an explanatory and critical text.

Mr. J. Tattersall's collection of modern pictures and a valuable collection of pictures and water-colour drawings were disposed of on Saturday, July 6th, by Messrs. Christie, Manson, and Woods. The collection was especially rich in the works of David Cox. The following are some of the most important: five sketches in sepia, 135 guineas; three drawings in water-colour ("Harbourne Lane," "Watering Horses," "Ploughing"), 140 guineas; two drawings ("A Hayfield," "Cader Idris"), 110 guineas; "Greenwich Hospital," with boats and figures, 105 guineas; two views on the Welsh coast, 100 guineas; "Milking Time," and "Looking up the Vale of Meanwrog," 108 guineas. All these were by Cox, but upwards of seventy-five sketches and drawings by this artist were sold. R. P. Bonnington, "The Rialto," 135 guineas; "River Scene," 115 guineas. Amongst Mr. Tattersall's pictures may be mentioned: "Highland Landscape," by Cooper, 138 guineas; and "Mountain Spring," by Poole, 145 guineas. On the same day a couple of examples by Courbet, "The Forest," and "Female Figure," fetched 180 guineas; a small river scene by Constable, 75 guineas; Vandyke's portrait of Judge Morton, exhibited in 1866 at the National Portrait Exhibition, 165 guineas; Sir Joshua Reynolds, "A Girl Sketching," from nature, 145 guineas; Nasmyth, "View on the Thames," 170 guineas.

New Publications.

BERTOLI, A. *I primi due Secoli della Letteratura Italiana*. Milano : Vallardi.

BOCK, F., u. WILLEMSSEN, M. *Die mittelalterlichen Kunst- u. Reliquien-Schätze zu Maestricht . . . archäologisch. u. historisch beschrieben u. s. w.* Köln u. Neuss : Schwann.

CARDINAL DE RETZ, *Oeuvres du.* (*Mémoires.*) Tom. I. et II. Paris : Hachette.

JOURNAL ET CORRESPONDANCE de André-Marie Ampère, publiés par Mme E. C. Hetzel. Paris : Techener.

KLEIN, J. L. *Geschichte des Dramas*. IX. Gesch. des Spanischen Dramas. 2. Bd. (See *Academy*, vol. ii. pp. 190, 191.) Leipzig : Weigel.

SOUVENIRS de la maréchale princesse de Beauvau (née Rohan-Chabot), suivis des Mémoires du maréchal, recueillis et mis en ordre par Mme Standish (née Noailles). Paris : Techener.

STAHR, A. *Kleine Schriften zur Literatur u. Kunst*. 2. Bd. : Biographisches u. Kritisches. Berlin : Guttentag.

Physical Science.

RECENT WORKS ON CHEMISTRY.*

[FOURTH ARTICLE.]

XI. *The Rock Salt Deposits of Stassfurt.* [Ueber die Steinsalzablagerung bei Stassfurt. Von C. Reinwarth.] Dresden : G. Schönfeld, 1871.

XII. *Organic Chemistry and Materia Medica.* [Die organische Chemie und die Heilmittellehre. Von A. W. Hofmann.] Berlin : August Hirschwald, 1871.

XI. THIS short monograph is by one who may almost claim to be the discoverer of the Stassfurt Salt Deposits.† A residence at that place so long ago as 1838 enabled him to study the geologic features of the country on the northern side of the Harz, and to ascertain what likelihood there was

of salt existing there. The attention of the Prussian government having been drawn to the matter, borings were made, and salt was found. Numerous researches, geological, chemical, and technical, subsequently led to the utilisation of the potassic compounds found in the deposits, and thereby to a great extension of the mines. In 1868-70 Reinwarth revisited the place, and acquired a knowledge of the work carried on. His observations he has embodied in this pamphlet, of which the following is an abstract.

Stassfurt, which formerly was a small agricultural village with a little saltwork, is situated some twelve miles to the south-west of Magdeburg. The formation on which it stands is the "bunter Sandstein," and consists of red and micaceous slates, beds of oolite, and large deposits of red clay with gypsum and anhydrite. There are very extensive beds of brown coal and several salt springs.

The first borings were made in 1839, when there was obtained a substance containing much magnesian salts, and it was not till after piercing this layer that rock salt was reached. This layer, containing salts of magnesium and potassium with gypsum, was for the time viewed as worthless, and was called "Abraum" salt. In 1851 two shafts were sunk—one in Prussia, the other in Anhalt—and in 1857 mining operations were started.

The whole salt deposit is upwards of 1300 feet thick, and consists of four groups, or regions. 1st. The lowest is the rock salt, which is compact, crystalline, and transparent. Sometimes it has a greyish colour, and it contains isolated cubes of a bright blue tint. The deposit is uniform, but it is divided into layers by very thin threads of anhydrite, which are supposed to indicate the successive depositions of salt which have occurred. In commerce the salt, according to its appearance and purity, passes under different names. It contains from 95-96 to 98-99 per cent. of common salt, the chief impurities being the potassic and magnesian chlorides and calcic sulphate. Organic matter is apparently absent, but gaseous hydrocarbons have been found in cavities in the upper layers. It is largely used, of course, for household purposes, but it is likewise consumed in fish-curing, agriculture, cattle-feeding, soda and glass making, and so on. The 2nd is the polyhalite group. Common salt predominates, but there is a notable quantity of salts of magnesium, calcium, and potassium; otherwise this group has no marked characters. The 3rd is termed the kieserite region (after Kieser, the president of the Berlin Academy), and it consists principally of magnesian sulphate with one molecule of water of crystallization, mixed with salt and carnallite. The main feature of this region is this abnormally hydrated magnesian sulphate. 4th. The Abraum salt—which has now become the most interesting of the whole, both chemically and industrially—consists mainly of carnallite, a double chloride of potassium and magnesium, which occurs both of a white and red colour, and contains traces of other salts and brilliant scales of micaceous ferric oxide. Several minerals have been found in this region: for instance, sylvite, native potassic chloride; kainite, consisting of potassic chloride and magnesian sulphate; tachydrite, a yellowish deliquescent double chloride of calcium and magnesium; stassfertite, magnesian borate, a heteromorphous form of boracite, under which name, indeed, this mineral was formerly erroneously known.

Having described the four regions, the author devotes the rest of the paper to an account of the potash industry, which, from the extent of Abraum salt disclosed both in the Prussian and Anhalt workings, may be hereafter developed to an almost unlimited extent. The Anhalt deposit is characterized by the quantity of kainite, which is found above the carnallite. This substance is used partly crude and partly calcined for

* See *Academy*, vol. ii. pp. 455-458.

† Leonhard und Geinitz, *Neues Jahrbuch für Mineralogie, Geologie und Palaeontologie*, 1871, p. 325.

spreading on the fields; and it is also used for preparing pure potassic sulphate.

The chief Stassfurt manufacture, however, is of potassic chloride. The raw material from the mine contains 50 to 60 per cent. of carnallite, 10 to 15 per cent. of kieserite, and 25 to 30 per cent. of rock salt, and the operation is based upon the superior solubility of the carnallite. When, accordingly, the raw substance is treated with warm water insufficient for complete solution, the carnallite is dissolved mainly. This solution on cooling deposits chloride of potassium and sodium. The mother-liquor on evaporation gives chloride of sodium, and double sulphate of magnesium and potassium, and the liquor from this by concentration chloride of potassium, or artificial carnallite. By greater concentration more carnallite is got, which on treatment like natural carnallite yields very pure potassic chloride. The strong solution that remains consists chiefly of magnesic chloride and bromide, and is employed for making pure magnesic chloride and bromine.

The residues, mentioned above, of kieserite, anhydrite, and rock salt, are utilised in various ways; crude and purified sulphate of magnesium are made, and chloride of magnesium. These salts are said to be largely used in this country in finishing light cottons and increasing their weight; magnesic chloride has been applied to artificial stone making, to extinguishing fires, and for other purposes. Bromine also is produced to the extent of 30,000 kilogrammes (about 30 tons) per annum (p. 22).

The potassic chloride, got from the carnallite as above described, is recrystallized, by which the percentage is raised to 95-98, but usually only 80 per cent. is supplied. This salt is largely consumed in preparing saltpetre, by double decomposition with nitrate of sodium. Potassic carbonate is also made from it by Leblanc's process, and quantities are used in soap-boiling, bleaching, the glass and alum manufactures. It is also used to a very large extent not only on the Continent and in this country, but even in America, as a fertilising agent. This branch of the manufacture has extended with the knowledge that potassium exercises a marked influence upon certain crops, and is indeed absolutely required by them.

At this point the author indicates a difference of which the agriculturist would do well to take heed, that, namely, between the amount of potash actually contained as potassic sulphate in a potash-manure and the amount of potassic chloride equivalent to a certain amount of potash (pp. 29-31). The manures prepared at Stassfurt, which are advertised under a great variety of names, and are recommended for as great a variety of crops, are either simply potassic salts (chloride alone, sulphate alone, or a mixture) more or less pure, or are phosphatic or other manures to which a certain proportion of potassic salts has been added. The consumption in this way, as has been already remarked, is considerable; of 270 million kilogrammes (not quite 270,000 tons) of potash salts raised in 1869, 25 to 30 million kilogrammes were made up for manures, and the quantity will in all likelihood increase.

The author discusses (pp. 35-39) the tax on salt and its influence on the whole industry. He points out how heavily it presses upon those least able to endure it, and how it prevents the Stassfurt salt from competing with the English. In the case of salt for cattle-feeding or for manufacturing purposes the tax is removed, but the salt by mixture must be rendered unfit for domestic use. The regulations on this point are strictly enforced, and when salt is sold the use for which it is intended must be stated in writing (p. 38).

The demand for potassium compounds is increasing rapidly every year, and there are some twenty works in full

operation at Stassfurt, following different methods for extracting the chloride and preparing the different salts. The usual indications of a manufacturing district are obvious: chimneys, smoke, railways, dense population, no vegetation; and the bright material side of a great industry in full glow. But the author mentions that there is also a dark side (p. 21).

This paper being occupied mainly with the industrial question alludes only incidentally to the manner in which the deposits have been formed. The generally held view is that the salts have solidified from a slowly evaporating salt lake, and that the order of deposit represents the different solubilities of the salts; the least soluble rock salt depositing first at the bottom, and the Abraum salt, consisting of the most soluble salts which crystallized only when the water had evaporated completely away, existing of course at the top. The Stassfurt basin appears to have been nothing else than a great salt pan, and some of the double salts found in it have been obtained by careful evaporation of sea water. But while this view may be on the whole correct, there are questions, to answer which it does not attempt. The formation of stassfurtite, for example, which is found in isolated masses distributed irregularly, is not understood, and the production of kainite must have been effected under conditions which have not as yet been imitated in the laboratory.

Other deposits containing potassium exist in other parts of Europe, and in particular at Kaluscz, in Galicia. From a variety of circumstances, however, operations at these places have not become so extensive as at Stassfurt, so that in the meantime the main supplies of the potassium compounds come from the great Magdeburg basin.

XII. On the 2nd of August last, the anniversary of the foundation of the Medico-Chirurgical Friedrich-Wilhelm Institute and Military Medical Academy in Berlin, Dr. Hoffmann delivered a very clever address, taking as his text the services to *Materia Medica* rendered by Organic Chemistry. The author begins with tracing the boundaries of organic chemistry as they at present exist. It is shown that, while the chemical elements seldom form more than two to five compounds with each other, there is a prominent exception in the case of carbon and hydrogen. Of these two elements, not only a very large number of compounds is known and described, but from the knowledge gained by their study it would appear that there is hardly a limit to the number of possible hydrocarbons. Among those known are bodies, solid, liquid, gaseous, of the most varying physical and chemical properties.

Into these hydrocarbons other elements, oxygen, chlorine, nitrogen, &c., can be worked in a variety of ways and with the production of changes the elucidation of which is at present the chief task of chemistry. So much has been achieved as to enable chemists, with some amount of certainty, to forecast the changes and to anticipate the constitution and properties of bodies resulting from a reaction.

The interest in these hydrocarbons and their derivatives is much heightened when it is known that it is of them mainly that a great part of plants and animals consists. Thus the hydrocarbons are combustible, and yield as products carbonic anhydride and water. So, too, do plants and animals. From this circumstance the hydrocarbons and their derivatives were called organic, it having been by the study of organisms that chemists first became acquainted with them. At first, discoveries were rapidly made, but inability to produce even the simplest compounds found in an organism led to the supposition that these bodies were of a kind and were the effects of forces differing from any that could be imitated by art. This view, however, has now changed, and bodies which were formerly obtainable from

plants or animals alone can now be fabricated by the chemist, who has at his disposal only the elements composing them.

Still, while the earlier partition-walls which were raised between organic and inorganic chemistry have almost entirely disappeared, the remarkable properties of the carbon compounds will continue to separate them from other bodies and to demand separate study and treatment.

Having thus displayed the compass and nature of organic chemistry, the author next recapitulates the services rendered by it to *materia medica*.

The first step in the progress of organic chemistry was the result of improved methods of analysis. By a more skilful use of solvents, for example, complex mixtures were separated into proximate constituents, better defined in form, composition, and properties. Belonging to this stage is the separation from opium of morphia and other bodies, of prussic acid from bitter almond oil, of valerianic acid from valerian root. Of these *materia medica* took possession. Soon, however, came a change in the mode of investigation. The definite proximate principals themselves were subjected to the action of the most powerful chemical agents, under varying conditions of time, concentration, and temperature, and thus entirely new bodies were got. During this period other alcohols were discovered, and one of these—amylic alcohol—was found in the distillers' residue called fusel oil. It had been found that spirit of wine and wood spirit, by oxidation, yielded each an acid; and amylic alcohol was subjected to the same action. How great was the surprise when it was found to be identical with valerianic acid got from the root. This was a boon to *materia medica*, for so long as the root was the only source, the acid was scarce, but when it was found that it could be derived from a fluid, to be rid of which most speedily was the aim of the distiller, the acid was at once prepared on a large scale, and converted into the valuable zinc and bismuth valerianates. Similar instances, described at length by the author, are afforded by lactic acid, now got from sugar, succinic acid, from malic acid, and benzoic acid, manufactured from hippuric acid. There are natural products, too, such as oil of mustard, which are prepared now, not from their native sources, but artificially, by the reactions which the study of their constitution in the laboratory has shown will produce them; and it is likely that with the progress of synthesis drugs got hitherto only by analysis and in small quantity will be fabricated extensively from their proximate constituents.

In the preceding instances, the gain to *materia medica* lay, not in absolutely new bodies discovered, but rather in the methods by which bodies already known and used could be obtained more abundantly. Absolutely new bodies, however, gradually came to light, and a rich crop of these has been yielded by the method of destructive distillation, a method which has largely extended the field of organic chemistry. In particular, two of these bodies, creosote and carbolic acid, have proved of the greatest value in surgery and hygiene.

The next stage was that of substitution. The effect of strong nitric acid in decomposing complicated bodies was tolerably well understood, but cases had been observed in which the new products were not simply oxidized, but contained nitrogen derived from the acid. Hence, for a time, every substance was subjected to its action, and many important compounds were discovered—nitrobenzol, picric acid, xyloidin, gun-cotton (to which the author might have added nitroglycerin). From gun-cotton, collodion has been prepared, which, in so far as it is used in surgery, is a contribution to *materia medica*.

Of more importance than nitric acid as a means of transforming bodies is chlorine, the effect of which has been examined with great minuteness. Of the almost countless bodies containing chlorine, chloroform and chloral are for the physician of the highest interest. The author describes the discovery of these bodies and of their properties at too great length for us to follow. He points out the purely scientific discovery of the properties of chloral, and shows that Liebreich's was one of the comparatively few instances of a discovery made deliberately. Its success is evinced by the fact that, whereas previous to its medical application not more than two or three pounds in all had been prepared, chloral hydrate is now manufactured in Berlin alone at the rate of a couple of hundred pounds every day.

A further extension of the doctrine of substitution has produced equally remarkable results. Bodies have been found to change entirely their physiological properties by the addition of one or more elements, or even by a change in the way the elements are combined. For instance, antimony in its tartrate is emetic, and arsenic in its oxide and hydride is highly poisonous, whereas the stibonium compounds and cacodylic acid have lost these properties. Still more recently there has been described a remarkable change of properties in strychnine and other alkaloids by the substitution of part of their hydrogen by methyl.

These are subjects of almost unlimited extent, which hitherto have attracted almost no notice. What the tendency is to be is obvious. Just as in dyeing different colours are now attained, not by mixtures, but by changes in the constitution of the colouring matter itself, so physiological effects will come to be produced, not by a mixture of drugs, but by a change in the constitution of the substance.

This address is an ingenious blending of historical development of chemical ideas and methods with a matter-of-fact account of one of the economic applications of them. At first it appears a simple and perhaps even apologetic statement of facts; but attention discloses an under-current of argument which is none the less powerful that it is marked. It contains, indeed, a tacit protest against the maintenance of a supposed difference or antagonism between scientific and technical chemistry. Very clever, too, is the manner in which the author at starting gets rid of the encumbering epithet "organic," and yet avoids the phrase "carbon," chemistry, though it be by a sacrifice, or at least an inversion, of the whole history of the subject. Into this we have not space to enter. The address will be found worthy of perusal.

JOHN FERGUSON.

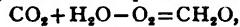
Notes of Discoveries and Scientific Work.

Chemistry.

The Meteorite of Ibbenbüren, Westphalia.—This stone was seen to fall on the 17th June, 1870, its descent being attended by the usual phenomena of light and sound. A fragment became detached at the time, and was found between three and four hundred paces from the aérolite. The latter weighed about two kilogrammes, had a density of 3·4, and was covered with a uniform black crust. It was recently examined by Prof. Vom Rath, who has communicated his results to the Berlin Academy (*Der Naturforscher*, No. 19, 153). The mass of the stone is white, or of a greyish-white colour, and encloses numerous crystalline granules, having a pale yellowish-green hue. The two constituents are identical in composition, being a bronzite ($MgFe)SiO_4$). The meteoric bronzites are distinguished from terrestrial species by their large proportion of iron oxide. We are now acquainted with four meteorites each consisting of a single silicate: the Chassigny stone, of olivin; the Bishopville meteorite, of enstatite; and those of Manegaum and Ibbenbüren, of bronzite.

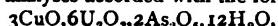
Aldol.—Wurtz has announced the discovery of an organic compound exhibiting at one and the same time the properties of an alcohol and an aldehyde (*Revue scientifique*, No. 49, 1171). With acetic acid it forms an acetic ether like aldehyde, while with nitrate of silver it produces a

metallic mirror. The new body, which is regarded as belonging to a type differing from those already known, is formed by the action of a mixture of water and hydrochloric acid on methylaldehyde at a low temperature. After the lapse of eight days the liquid is to be neutralised, extruded with ether, and after the removal of this solvent by evaporation, the residue is to be distilled in vacuo. In this way a colourless liquid is obtained, which in about twelve hours acquires the consistence of thick syrup of sugar. According to more recent information (*Ber. Deut. Chem. Gesell. Berlin*, No. 11, 533), the new alcohol possesses the composition $C_4H_8O_3$, and has a density of 1.1208 at 0°, of 1.1094 at 16°, and of 1.0816 at 40°. Its co-efficient of refraction is for the sodium line 1.458. If aldol be heated to 100°, with three times its weight of anhydrous acetic acid, two acetides are formed; one boils in vacuo at 100°, and has the composition $C_4H_8O(C_2H_4O_2)_2$, the other passes over between 150° and 160°, and appears from analysis to agree in composition with diacetate of crotonaldehyde, $C_4H_8(C_2H_4O_2)_2$. Nitric acid oxidises aldol with great energy, forming oxalic and other acids which have not as yet been investigated. Phosphorous pentachloride acts on aldol with great violence, and converts it into a chloride, $C_4H_8Cl_2$, that undergoes decomposition by distillation, forming hydrochloric acid, and, it is probable, the chloride of crotonaldehyde, $C_4H_8Cl_2$. The ether of aldol, $(C_4H_8O_2)_2O = C_8H_{14}O_3$, boils, under a pressure of 2 atm., at 137°, and separates from water in crystals that melt at 155°. Both aldol and its ether act very powerfully on Fehling's copper solution. When treated with dilute hydrochloric acid or nitric acid, aldol breaks up into water and crotonaldehyde and some resinous products. Wurtz directs attention to the important part that methylaldehyde probably plays in vegetation in respect to the production of certain substances met with in plants. He shows that methylaldehyde may arise from a partial reduction of carbonic acid:

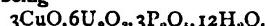


of which several molecules may, by a condensation analogous to that observed in ethylic aldehyde, produce bodies that in several cases are alcohols, and in one aldehyde. Carbohydrates are instances of this.

Zeunerite.—A. Weisbach, in a letter from Freiberg, published in the *Jahrbuch für Mineralogie* (part ii.), states that the supposed chalcolite accompanying the new minerals trögerite and walpurgine, recently found in the Weisser Hirsch Mine of Neustädtel, is likewise a new mineral species. It completely resembles chalcolite as regards lustre, hardness, colour, crystallization, and cleavage, but differs from it in density, the latter approaching 3.2. Zeunerite contains no phosphoric acid, and varies from chalcolite in containing arsenic acid in the place of that acid. The mean of two analyses accorded with the formula



that of chalcolite being



Heterogenite.—Under this name A. Frenzel describes (*Journal für prakt. Chem.* No. 9, 407) a new mineral occurring with lithiophorite in the Wolfgang Meessen Mine at Schneeberg. It is an amorphous substance of a black or brownish-black colour, has but little lustre, and forms uniform masses; its hardness is that of calc spar, and it has a specific gravity of 3.44. It has a composition corresponding with the formula $CoO, 2Co_2O_3, 6H_2O$. It was at first taken for asbolan, but contains too small a quantity of manganese for qualitative determination. Associated with it are pharmacolite and a red-coloured calc spar.

Ozone.—It has been observed by Prof. H. H. Croft, of University College, Toronto (*American Jour. of Science*, June, 465), that a syrupy solution of iodic acid, prepared by Millon's method, if evaporated over sulphuric acid, emits a strong odour of ozone as soon as crystals begin to form. The experiment has been made repeatedly, and no change is noticed when a few crystals begin to form, but the strong smell of ozone is noticed as soon as the crystallization has fully set in. Mr. Sterry Hunt, by way of accounting for this phenomena, ascribes it to a partial deoxidation similar to that which produces ozone when permanganates are decomposed; the author, however, considers this explanation insufficient.—L. Casius has determined (*Ber. Deut. Chem. Gesell. Berlin*, No. 11, 520) the co-efficient of absorption of ozone by water. Ozone was formed by Soret's method, and passed through water for two hours at temperatures from 0°.5 to 3°. The water at the end of this time possessed in a high degree the characteristic odour of ozone. Potassium iodide turned it brownish-yellow—an excess of the water easily destroying the colour and converting the iodine into iodic acid, while litmus and indigo are readily bleached. A solution of thallium oxide soon deposited brown flocks of peroxide. Silver leaf remains unchanged in ozone water for any length of time, provided it be entirely immersed in the liquid; if any air be present, peroxide is formed, and the smell disappears. According to an examination made by Bunsen's volumetric method, 1000 cc. of water take up in addition to oxygen from four to five cub. cent. of ozone.

The Inorganic Constituents of Blood.—An elaborate paper, treating this question, and containing the results of many analyses made by the author in the laboratory of Prof. Stricker, is published by A. Jarisch,

of Vienna, in the *Ann. der Chemie*, June, 1870, 236. A mean of four analyses of the blood of the dog gave the following number as constituents of 100 parts:—

Phosphoric anhydride	0.1103
Sulphuric anhydride	0.0358
Chlorine	0.2805
Potash	0.0342
Soda	0.3748
Lime	0.0112
Magnesia	0.0058
Iron oxide	0.0948

A paper by Boussingault was read before the Academy of Sciences (*Revue scientifique*, No. 49, 1171) on the constant presence of iron in the tissues. He finds that the flesh of a large species of snail contains about the same amount of iron that is found in beef, the former being 0.0036 per cent., the latter 0.0048 per cent. The white blood of Mollusca contains, he believes, about the same amount of iron as the red blood of Vertebrata.

Zoology.

The Sense of Sight in Birds.—Dr. R. J. Lee has come to the conclusion (*Proc. Roy. Soc.* May) that in Birds perfection of sight depends on the power of accommodation of the eye to distance and on the development and character of the ciliary muscle: a conclusion which is supported by M. Tegetmeier's observations on pigeons. He expresses a belief that "homing," as it is termed, in the Antwerp pigeon is the result not of instinct, but of observation. These pigeons have to be trained stage by stage, or they are certain to be lost. The best of them refuse to fly in a fog or in the dark. They seek in new localities some known landmark, and their gyrations gradually increase till they descry some familiar object, when they recollect their route and fly straight ahead. The objection that no pigeon can possibly see two hundred miles ahead is in direct opposition to aeronautic experience, Mr. Glaisher, at an altitude of half a mile, having been able to trace the course of the Thames from the Nore to Richmond.

Recent Fossil Man.—In the *Popular Science Review* for July, Prof. Morris gives a short report on the recent discovery of a sub-fossil human skeleton in a cave in the south of France, with some introductory remarks on the few cases in which the remains of man have been found associated with those of extinct animals. The most recent discovery was made early this year in one of the great caves (Baoussé-roussé) of the Italian frontier (near Mentone), by Dr. E. Rivière. The skeleton, which is that of an ordinary-sized man, is entire, with the exception of the ribs that have been broken by the pressure of the superincumbent soil. The legs crossed in a natural position, and the arms folded near the head, seem to indicate that the man to whom they belonged died during sleep (?), and that his remains were carefully covered over without disturbing the earth beneath. Mr. Moggridge believes that it is an instance of interment during the stone age, and late in that period.

Note sur les Singes fossiles trouvés en Italie, précédée d'un aperçu sur les quadrumanes fossiles en général. By Forsyth Major.—Some fossil remains of monkeys found in the valley of the Arno, and of Pliocene age, are considered by the author to have belonged to a species closely allied to, if not identical with, the monkey still found living on the rocks of Gibraltar (*Macacus inuus*). A mandible discovered at Monte Bamboli, in Tuscany, is referred by Gervais to the genus *Cercopithecus*. Fossil remains of monkeys are extremely rare; in Europe they have been found only at the following localities: Woodbridge, Suffolk (the Eocene *Eohippus*); Württemberg, Swiss Jura, Zürich, and the south of France (Montpellier).

Caratodus.—An abstract of Dr. Günther's papers on this fish appears in the *Popular Science Review* for July, with addition of some later observations. The author draws attention to the remarkable fact that the Ganoid family of *Sireniidae* coincides, as regards geographical range, with the Teleosteous family of *Osteoglossidae*, and shows that representatives of both these natural families, which externally are so similar and structurally so dissimilar to each other, are found in the same freshwaters of the tropical regions of America, Australia, and Africa. It is only in the East Indian Archipelago that the Ganoid representative of the Teleosteous *Osteoglossum formosum* has not yet been found. *Osteoglossum formosum* has hitherto been met with in Sumatra, Banka, and Borneo; and as scarcely anything is known at present of the inland fishes of the latter island, the author thinks it highly probable that a Ganoid fish may be discovered there.

The *Bulletin de la Société impériale des Naturalistes de Moscou*, vol. xliiv, Nos. 3 and 4, contains the following zoological papers: 1. J. Borsenkov, On the Development of the Ovary of the Fowl, and its development during the first period of life; pp. 11–60. 2. J. H. Hochhuth, Enumeration of Coleoptera hitherto found in the Russian provinces of Kiev and Volhynia (continued); pp. 85–177. 3. L. Sabanéef, Catalogue of the Mammals, Birds, Reptiles, and Fishes of the Middle Ural; pp. 210–278 (written in Russian). 4. Chaudoir, Remarks on the Catalogue

of Harold and Gemminger; pp. 279-287. 5. H. Trautschold, On the Primogeniture of Trilobites. The last paper is polemical, and directed against Barrande, who, in his work, *Les Trilobites* (1871), showed that the appearance and distribution of the first organisms in the strata of the primordial era is decidedly opposed to the Darwinian doctrine. He maintained that the lowest organisms do not precede more highly organized animals, and more especially that the higher Trilobites existed long before the lower Cephalopodes and Acephales. Trautschold's case against Barrande is based on the following arguments: 1. The fact of our not finding *Foraminifera*, with the exception of the very doubtful *Eozoon*, *Acephala*, &c., or their representatives, in strata where we should expect them, cannot be taken as a proof of their non-existence, since the sea-water in which they lived differs to a great extent from the salt-water of the present period in its chemical composition, containing a far less quantity of salts; and it consequently follows that those animals were probably not provided with hard shells, which alone could have been preserved. 2. A striking example of the gradual change of animals in the progress of time is afforded by the fossil shells of a high sea cliff near Kertsch, where it can be demonstrated that the forms of *Cardium* in the higher strata are the descendants of those having very different shells in the lower. 3. It is difficult to suppose organisms living under constantly varying conditions should undergo no change. Every kind of organism has limited period of existence only; some, being unable to survive a change of external physical conditions, perish; others, according to their innate power of accommodating themselves to such a change, or according to the more or less favourable conditions of their surroundings, are developed into lower or higher forms. Low and high organisms will consequently be found in association at all times and in each horizon.

We regret to have to record the death of two eminent zoologists. Dr. William Stimpson, Secretary of the Chicago Academy of Sciences, the indefatigable investigator of marine Invertebrates, died at Ilchester, Maryland, on the 26th May. The total destruction of his magnificent collections of specimens, books, and manuscripts, by the Chicago fire proved too terrible a blow for a man of his delicate constitution.—Mr. T. C. Jerdon, the celebrated Indian ornithologist, died last month at Upper Norwood. Only about a year since he returned to Europe with the purpose of arranging the collections made during the last two years of his travels in India. The cause of his death was chronic dysentery, from which he had obtained but temporary relief.

Dr. Kuno Fischer, the eloquent writer and lecturer on philosophy, has accepted a chair at Heidelberg.

New Publications.

- BARRAULT, E. *Parallèle des Eaux minérales de France et d'Allemagne*. Paris: Bailliére.
- EUCKEN, R. *Die Methode der aristotelischen Forschung in ihrem Zusammenhange mit den philosophischen Grundprincipien d. Aristoteles*. Berlin: Weidmann.
- GOPPELSRÖDER, F. *Zur Infection des Bodens und Bodenwassers*. Basel: Schweighäuserische Verl.
- GREVILLEA: a Monthly Record of Cryptogamic Botany and its Literature. Edited by M. C. Cooke. No. I. Williams and Norgate.
- NEUMAYER, G. *Die Erforschung des Süd-Polar-Gebietes*. Berlin: Reimer.
- REICHARDT, H. W. *Ueber die botanische Ausbeute der Polar-Expedition des Jahres 1871*. Wien: Gerold's Sohn.
- RESPIGHI, L. *Relazione sul suo Viaggio scientifico nelle Indie Orientali*. Roma: Botta.
- WIGAND, A. *Die Genealogie der Urzellen als Lösung des Descendenz-Problems*. Braunschweig: Vieweg.
- YOUNG, C. A. *The Sun and the Phenomena of its Atmosphere*. Newhaven, Conn.: Chatfield.

History.

Matthaei Parisiensis Chronica Majora. Ed. H. R. Luard. Vol. I. The Creation to 1066. (Rolls Series.)

Official Correspondence of Thomas Bekynton, Secretary to King Henry VI., and Bishop of Bath and Wells. Ed. G. Williams. Two volumes. (Rolls Series.)

The Chronicle of Matthew Paris, the monk of St. Albans, who wrote under Henry III., was printed by Archbishop Parker in such a way that the historian has never yet had

justice done to him. Editors at that time corrected the copy made for them from the original manuscript by a careless transcriber, so as to get something like sense out of it, but seldom referred to the manuscript for themselves. Even Henry Wharton pleads this excuse for the state of some of the passages which he has printed in the *Anglia Sacra*. Parker, however, altered even more than such an excuse would justify; and it only needs a slight comparison of the real text as given by Mr. Luard with the first edition in 1571 to discover the real state of the case.

The early part of the *Chronicle* is based on a previous compilation made at St. Albans; and the question of the real authorship is difficult. It is nearly identical with the similar Chronicles known under the names of Roger of Wendover and Matthew of Westminster; and yet these have been quoted, as if independent authorities, even by writers like Lappenberg and Earle, not to mention Sharon Turner. In reality, says Mr. Luard, the earlier portion of "Matthew of Westminster" is a transcript, with additions and omissions, of the MS. of Matthew Paris at Corpus Christi College, Cambridge—a transcript made at St. Albans itself, and then lent for transcription to other monasteries: the earliest of the many MSS. of Matthew of Westminster is in the Chetham Library, at Manchester; and this is the source of all the rest. In one place the Corpus MS. has "Athelmus Wintoniensis" (an error for Wiltoniensis) "co," for "comes"—the MSS. of Westminster read "cor," except the Eton MS., which has "episcopus": Parker prints "episcopus," and on the strength of this an Athelm has been inserted in the lists of the bishops of Winchester. Similarly, Roger of Wendover, in his first part, seems to copy the same compilation as the Corpus MS. of Matthew Paris. The author of this laborious compilation, used by Paris and Wendover as the basis of their histories, and the source of the popular compendium called by Matthew of Westminster's name, is unknown, having been soon thrown into the shade by the greater fame of his successors. Perhaps he was the author of the *Life of Offa* also, of which he quotes pieces; and he must have written just about the time of the struggle which led to the granting of Magna Charta. He consulted a very large number of sources, which Mr. Luard has most carefully traced out, but he has been the author of endless confusion in early dates and facts; the MS. of the *Anglo-Saxon Chronicle* which he used was the "Peterborough" one; but he did not always understand it. It shows how little we have really lost by the destruction of the monasteries, that we still possess almost every author which he did. The list of authors used by him is given by the editor; and it is especially interesting as showing what, probably, was the extent of the historical library at St. Albans, in the earlier part of the thirteenth century; we may compare it with other lists in Edwards' *History of Libraries*. Perhaps an annal of Northumbria and one of Kent lay before him, which are not now known to exist, and one or two Saints' Lives; but the Historical Commission may still find them for us. In one place, when copying Henry of Huntingdon, he interprets "secunda usus fortuna" as meaning "being victorious on a second occasion," and has actually introduced an account of a second victory, A.D. 836. He translates the Anglo-Saxon *thriddan healfre* "three and a half," instead of "two and a half;" and where the *Chronicle* calls a comet "feaxede (hairy) star," the compiler says, "vexede sterre." Such was the St. Albans compilation, which Matthew Paris used as the basis of his history, making, however, certain corrections and additions. With his notes on Merlin's prophecy, we may compare the very curious commentary by John of Cornwall, in Greith's *Spi-cilegium Vaticanum* (Frauenfeld, 1838), pp. 99-106, which

quotes some of the original Celtic words, a fact which does not seem to be generally known. For the really valuable part of Matthew Paris, we must wait for Mr. Luard's following volumes, where his careful editing will be of material service to the cause of English history. Petrie's *Monumenta* only gave the parts of authors which were valuable as original authorities; but it is impossible to criticize or value aright the work of any mediaeval writer unless we have before us the whole history as he conceived it, and can see how he carried out his conception. The relation of the mediaeval chroniclers to each other is still a very vexed question, to which Mr. Luard has here contributed some material evidence.

We pass into a very different region when we take up Bishop Bekynton's *Correspondence*. The manuscript in the Lambeth library is a Letter-book, compiled probably under Bekynton's immediate direction, and extending over a period of more than half a century—from the reign of Richard II. to the latter part of the reign of Henry VI. The documents illustrate both the foreign relations and the domestic condition of England, and throw light on the private life and character of one of the most able and active ecclesiastics of the time—a time when the servants of the Crown were rewarded with high offices in the Church, as the approved method of paying them for their services. Sir Harris Nicolas had already translated Bekynton's journal of his embassy to Bordeaux, and prefixed a memoir of the author, to which many particulars may be added from the work before us. Unhappily his collection of political documents for England and France during Henry V.'s reign, in the Cottonian collection, was so much damaged by the fire as to be scarcely legible. A third volume, about the English claims to the crown of France, survives. Bekynton was born at the village of that name, just north of Frome, in Somersetshire, about 1390, and educated at Winchester and New College, and was therefore resident in the university during the memorable controversy with Archbishop Arundel, in 1411. He then transferred himself to the service of Duke Humphrey of Gloucester, and received several church preferments. In 1432 he was sent to France to negotiate a truce, and in 1439 accompanied Cardinal Beaufort in the embassy to Calais, his journal of which has been published by Sir H. Nicolas, in the fifth volume of *The Proceedings of the Privy Council*. He had been just previously named secretary to the king, and on his return was "appointed his reader nearly every day." A letter to Abbot Whethamstede, of St. Albans, illustrates the ingenious ways used to evade the Mortmain Act. The abbot first suffered the lands to be seized by the king's escheator, and then begged them as a donation from the crown, through his friend, Duke Humphrey. The correspondence with the Curia Romana well illustrates the "omnia Romae cum pretio," which was as true of the ecclesiastical as of the civil capital of Europe. The pope's secretary, Biondo of Forli, sends Bekynton, as a small return, his "Decads" of History, of which Mr. Williams prints part of the fourth book, hitherto almost unknown, relating to the state of Italy in 1441; but also giving a very interesting account of a papal mission to Abyssinia, of the church in that country, and of its submission to the see of Rome—the Abyssinian part being what our editor has extracted for us. The ambassadors said that their rivers flowed "in lacum tantae magnitudinis ut mare videatur et vulgo appelletur, aut in Nilum, cuius originem apud se notissimam esse contenderunt, exonerari." Another passage says, "Simbolum Graeco more absque 'Filioque' singulis horis dicunt." In 1442 Bekynton was sent to Bordeaux to negotiate Henry's marriage with a daughter of the Count of

Armagnac; and it is the diary kept by one of Bekynton's suite which Nicolas published in 1828. It gives a vivid picture of the manners of the time, and it is important for its bearing on the history of the English domination in the Duchy of Aquitaine, as it trembled to its fall. The ambassadors rode from Windsor by Abingdon, Devizes, Wells, Glastonbury, Taunton, and Tiverton to Exeter: the diary is very business-like—"ad coenam cum J. Whaddam, vicomite comitatus Devonensis. Post coenam magister Roos equitavit versus Powderham, et pernoctavit cum domino Philippo Curteney milite." They sailed from Plymouth, and harpooned a shark during a calm. On their return they landed at Falmouth, the mission having wholly failed. The frost, which blocked up the Garonne with ice, also congealed the colours of the artist Hans, whom Henry had charged to take faithful portraits of the three young ladies; and Hans, apparently, only completed one picture. Soon after this, Bekynton was made Bishop of Bath and Wells, after having just before accompanied William Waynflete, then Provost of Eton, to Cambridge, with the first detachment of king's scholars (as our editor is careful to note). There are other very interesting notices about the universities; and we may specially notice the letter of the university of Paris against the new university which the English had set up at Caen, under Michael de Tregury, Fellow of Exeter College, Oxford, and afterwards Archbishop of Dublin. Nor are indications wanting of coming change. A letter to the general of the order of the Carmelites sets forth such irregularities and abuses in the monastic system as appeared to thoughtful minds to forebode its utter ruin and subversion. There are also constant complaints of the way in which the pope gave English benefices to foreigners neither residing nor able to reside, ignorant of the language, not knowing their people nor known of them. At the Benedictine abbey, also, of St. Séver, in Aquitaine, the prior and a few monks had procured from the pope the appointment of a boy of sixteen—otherwise canonically disqualified (being the illegitimate son of a count)—as their abbot, and had forged letters from the citizens, thanking the pope for his admirable appointment. Such flagrant abuses of irresponsible power, gradually usurped by successive popes, had always been impatiently borne by the English people; and there are indications in these volumes that a spirit of resistance was beginning to manifest itself, both in clergy and laity, which culminated a century later in the assertion of the regal, as against the papal, supremacy. One memorable example was given at this very time, in the treatment of Archbishop Chicheley by the imperious Martin V.; who further imposed an entire tenth, to be levied in England, for the Bohemian war. The popes as little understood the temperament of the national character as they did the nature of the English constitutional government. We have also some illustrations of the proceedings of the Councils of Constance and Basle. The anxiety manifested by the King of England, in common with the Emperor Sigismund and the princes of France, to prevent a collision between Eugenius IV. and the Council of Basle, and to inculcate on both sides moderation and forbearance, was, as might be expected, quite thrown away. As to the attempt at reconciliation between the Eastern and Western churches, it is evident that the mutual suspicions and jealousies of the pope and the council sorely perplexed the Greek envoys. On the whole, these volumes give a good picture of England as it was, before the outbreak of the Wars of the Roses; and we cannot but speak highly of the way in which they are edited. If there is a fault to find, it is that some of Bekynton's letters, illustrative of his embassies, already printed by the Camden Society, have not

been added, since they form an almost indispensable part of the series, and would have taken up very little room. We trust that these volumes may be followed by other series of letters and documents, which are at least as necessary as chronicles for our history. Not that all the chronicles are as yet reprinted according to the original plan. Henry of Huntingdon, and Rudborne, the Winchester historian, are as yet untouched; and there is even a Latin translation of the *Anglo-Saxon Chronicle* at Lambeth as yet unprinted. The Germans are making every effort to complete their series both of chronicles and of documents; but the publication of our series of charters, so well begun by Sir T. D. Hardy, has unhappily been long suspended. There are yet a number of the smaller *Annales Monastici*, not included in Mr. Luard's edition, which await an editor to trace out their sources and give them a good index. It seems ungracious, when so much is well done, to ask for more; we can only plead that good editions are apt to make us discontented with those that are old and defective. Mr. Williams' preface, of part of which we have given an abstract above, is especially good and readable. The similar preface to Mr. Luard's work is yet to come.

C. W. BOASE.

The Opposition of the Estates of Bohemia to King Ferdinand I. in the Year 1547. By Professor Karl Tieftrunk. [Karla Tieftrunka odpór stavuv českých proti Ferdinandovi I. L. 1547.] Prague : Franz Riznacz.

THE Bohemian Museum has just published a most interesting and elaborate work in the Bohemian language, on a little known but very important historical epoch. It details the share of Bohemia in the first unsuccessful attempt at resistance after the time of Luther on the part of those who were not Catholics against the papal and imperial supremacy in the lands of the German empire. Had it met with greater success, the bloody history of the Thirty Years' War would in all probability never have been written.

Professor Tieftrunk has availed himself of contemporary sources of unquestionable authority, especially the manuscript *Diary* of Sixtus of Ottersdorf, then chancellor of the Old Town of Prague, who took a prominent part on the side of the estates, which is in the Bohemian Museum; and the *Acta*, compiled and printed upon the suppression of all resistance by the orders of Ferdinand himself, after careful search had collected for destruction all documents, letters, &c. that might testify against his proceedings. Good use has also been made of the archives of Bohemia, of the records in the "Landtafel," of the treasures of the Bohemian Museum, and the archives of the city of Prague.

Professor Tieftrunk commences his work by an introductory essay upon the new and important elements in Bohemian society, which had arisen since the suppression of the democratic Hussites or Taborites. These were (1) the *Jednota Bratrská*, or *Unitas fratrum Bohemorum*, from which descends the present exemplary community of the "Moravian" Church; (2) the Burgher Estate, which in intellectual and political development had risen far above the two orders of nobility, the *Pani*, or Lords, and the *Rytirzi*, or Knights. He also describes the low condition into which the parliaments of the three estates had fallen, and the chicanery by which the king circumvented all efforts to maintain the liberties of the realm and the estates, at the gradual destruction of which he was steadily and consistently aiming with the characteristic unscrupulousness of a Hapsburg.

The first book contains an account of the commencement of the contest between Ferdinand and the estates in 1546, when the Protestant princes, John Frederic, Elector of

Saxony, and Philip, Landgrave of Hesse, were put into the ban of the empire by the emperor, Charles V., whose undoubted aim was the establishment of his own and the papal supremacy in the most absolute form. Reciprocal covenants of inheritance had long existed between Saxony and Bohemia, and Ferdinand induced the upper and lower orders of nobility, against the will of the burgher estate, to consent to their renewal with Maurice of Saxony, the ally of Ferdinand's brother, the emperor, to the exclusion of the Protestant elector. He then proclaimed war against the elector in execution of the ban, summoned the country to his aid and invaded Saxony; but was unable to effect much, as the militia of the estates was not bound to follow his banner beyond the frontiers.

The second book relates Ferdinand's preparations for a new campaign against Frederic of Saxony in 1547, and the commencement of opposition to his policy, which both the Utraquists and the Brethren saw to be aimed at the eventual destruction of their liberties and religion.

In the third book we find a detailed account of the resistance made by the estates to the royal policy, the citizens of Prague and afterwards the greater part of the estates entering into a "Friendly Agreement" to defend the liberties and constitution of the country, with all due respect to the person of the king. The estates also negotiated with the elector, but declined to render him any active assistance, though they raised an army themselves, elected a general, and forbade any Bohemian to cross the frontier in aid of the king against the elector, with whom they considered themselves to be at peace.

The fourth book relates various abortive negotiations, which vainly attempted to put an end to the differences between the king and the estates; and also the junction of the forces of Ferdinand with those of his brother, the emperor, at Eger, and the vacillating conduct of the estates at the crisis.

In the fifth book we find the results of the disastrous battle of Mühlberg, in which the elector was defeated and taken prisoner, and the commencement of the successful endeavours of the king to detach the greater portion of the two orders of the nobility from the burgher estate.

The sixth book relates the punishment of the estates, especially of the "royal" cities, above all, that of the Old and New Towns of Prague, the whole of whose landed property, rights of toll and dues, was confiscated, their leading men, Sixtus of Ottersdorf included, imprisoned and tortured, and the communities obliged to surrender to the king at discretion. All the other towns and such nobles as the king thought fit to summon, and who did not seek safety in flight, were compelled to deliver themselves up to him in a similar manner. Torture and cruelty were freely used, in order to obtain evidence for the suspicion of the king, that the intention of the estates had been to dethrone him and place the crown on the head of the Elector of Saxony. No such intention had existed, and no evidence was obtained. The confiscations, the details of which are given, were enormous.

The seventh book details the political, legal, and religious changes introduced by Ferdinand I. into Bohemia after the above events. It commences with an account of the "Bloody Parliament," so called from being opened by the execution of four leading men, two belonging to the lower order of nobility and two to the burgher estate. After this the parliament naturally assented to every demand of the crown, and, in fact, to the conversion of Bohemia from a limited monarchy into almost a despotism, the independence of the cities being entirely destroyed, and their authorities placed under the surveillance of royal officers, while but a

shadow of their former power was left to the estates. In the country the especial wrath of the king fell upon the *Unitas fratrum*, large numbers of whom were compelled to quit Bohemia, so that henceforth Moravia, which had not shared in the resistance of the estates to the crown, became their chief seat, and produced not only their most celebrated men, e.g. J. A. Comnenius, but also the Královské Bible. John Augusta, who was considered the head of the *Unitas*, was taken in 1548 by an act of the basest treachery, tortured, and imprisoned for sixteen years.

The "Friendly Agreement" of the estates is printed as an appendix to the work.

It is difficult to refuse admiration to the consummate craft and consistency with which Ferdinand proceeded towards the realisation of his projects, never taking an over-hasty step, nor shrinking from making or breaking a promise, as circumstances might require. On the other hand, the indecision and weakness of the estates in general, with perhaps the exception of the citizens of Prague, is very noticeable, as compared with the vigour and steadfastness displayed by the Hussite Bohemians, when under Ziska and his successors they bade defiance to the whole power of Rome and the empire, aided by every device that religious bigotry could bring to bear.

Professor Tiefstrunk has done good service both to his country and to history by this opportune and excellent work, the style of which is both clear and elegant, and which deserves to appear in a translated form in a language more accessible to the general run of historical students than the Bohemian.

A. H. WRATISLAW.

New Publications.

- BRESSLAU, H. *Diplomata centum in usum scholarum diplomaticarum ed. et annotationibus illustr.* Berlin : Weidmann.
- CONFÉRENCES STRASBOURGOISES. *Guillaume le Taciturne*, par A. Tabatier—Abraham Lincoln, par Rod. Reuss—Agrippa d'Aubigné, par G. Guidal. Strasbourg : Treutter et Würtz.
- FEILL, F. *Cardinal Salm u. seine Friedenswerke. Ein Beitrag zur Geschichte Kärntens.* Graz : Leuschner u. Lubensky.
- FOCK, O. *Aus den letzten Tagen Pommerscher Selbstständigkeit. Wallenstein u. der grosse Kurfürst vor Stralsund.* Leipzig : Veit.
- FORSYTH, W. *History of Ancient Manuscripts.* Murray.
- MONOD, G. *Etudes critiques sur les sources de l'histoire mérovingienne. 1ère partie.* (Bibl. de l'École des hautes Études. VIII.) Paris : Franck.
- SIEVERS, C. G. *Hamburg am Schlusse d. 17. Jahrh. Eine Studie.* Hamburg : Mauke.
- SONNENSCHEIN, C. F. *La Tradition de Tell d'après les recherches critiques des historiens contemporains.* Dresden : Schöppf.
- STOCKMAR, Ernst Freiherr von. *Denkwürdigkeiten aus den Papieren des Fräulein Christian Fr. von Stockmar zusammengestellt.* Braunschweig : Vieweg.
- TOURGUENIEFF, Alex. *Lettres à son frère Nicholas.* (In Russian.) Leipzig : Brockhaus.
- WORMSTALI, J. *Ueber die Wanderung der Bataver nach den Niederlanden.* München : Regensberg.

Philology.

Markham's Translation of Ollanta. Ollanta, an ancient Ynca drama, translated from the original Quichua, by Clements R. Markham, C.B., Corresponding Member of the University of Chile. Trübner and Co., 1871.

HAVING already had occasion to review in the *Academy** a Spanish translation of *Ollanta*, published three years ago

by M. Barranca, of Lima, I may refer the reader to my former paper for a short sketch of the drama, and for two or three of the most interesting passages in it. Thus I shall have more space to discuss the questions relating to the origin and genuineness of the play.

As Mr. Markham justly remarks—

"The all-important question is whether the drama was handed down from the time of the Yncas, and merely committed to writing by Dr. Valdez, who divided it into scenes, and inserted the stage directions; or, whether Dr. Valdez was the actual author, and composed the work himself in a classical, and, in his day, almost archaic language."*

In the above-mentioned review I had tried to prove "that *Ollanta* is not a production of early times, but was written long since the completion of the conquest, by a man who did not possess any means of information beyond what we do now."

In the preface of his edition, Mr. Markham affirms that *Ollanta*

"is an ancient Ynca drama, handed down orally in order to be performed before the native chiefs, until 1780, and then committed to writing from the mouth of Indians by Dr. Valdez, the friend and sympathiser of the last of the Yncas. The old priest merely made the divisions into scenes, which suggest themselves; and introduced the stage directions in accordance with what he had himself seen when the play was acted by the Indians."†

Mr. Markham's reasons for so thinking can be summed up as follows :

1. His own collation of a copy taken from the original manuscript of Dr. Valdez gives classical Quichua in every single instance where a corrupt or Hispanicised word or phrase occurs in the von Tschudi version.

"This proves that all the corrupt forms in the von Tschudi version arise from the carelessness of a copyist, and that they have no existence in the original documents."‡

2. "Moreover, the drama contains many words and grammatical forms, some of which I have indicated in the notes, that are archaic and long since disused."

3. "The only object of a Spanish priest"—for such was the condition of Dr. Valdez—"in composing such a work would be to inculcate Catholic doctrine; and not to preserve the memory of ancient pagans in absolute purity."§

1. Mr. Markham's copy was taken by Don Justo Pastor Justiniani, descendant of the Incas, from the original manuscript of Dr. Valdez, and given to Mr. Markham himself by Don Pablo Justiniani, Don Justo's son, and now curate of Laris. Thus, the text of the present edition is older and purer than that already published by Tschudi, and gives many corrections and additions, several of which are of considerable length. When Ollanta, pardoned by *Inca Kapak-Yupanki*, thanks him for his generosity, Mr. Markham adds to the three lines of Tschudi's version—

"O Inka! this is too much
For a man who is nothing.
Mayst thou live a thousand years!"

the following tirade :

"I am as thou makest me,
Thou dost give me succour :
Crippled, thou makest me stand ;
Fallen, thou raisest me up ;
Poor, thou enrichest me ;
Blind, thou givest me sight ;
Dead, thou restorest life ;—
Thou indeed teachest me to forget."||

When Ima-Sumak tries to force her way to the Inka, in Tschudi's edition she says but four lines :

"What dost thou love most ?
Leave me to the father !
Do not prevent me !
Lo ! there is some one dying !"

* See the *Academy* for January 1870 (vol. i. p. 89).

† *Id.* pp. 10, 11.

‡ *Id.* p. 8.

§ *Id.* p. 12.

|| *Id.* pp. 106, 107.

while Mr. Markham's text runs as follows :

" Why should it be a day of joy ?
What dost thou love most ?
Leave me to the father,
Let me speak to the Inca !
Do not prevent me !
Let me pass the door !
Lo ! there is some one dying !
Lo ! there is sickness, even to death !?"*

However, the greater part of the variants are only correct readings of dubious passages, which enable us to restore almost all the corrupt lines in Tschudi's version.

In one place, at least, it seems to me that the text, as given by Mr. Markham, proves the presence of an unmistakable Spanish word in the original manuscript of Dr. Valdez. The passage to which I allude is to be found at the end of the first scene.† Ollanta, after a long conversation with the high-priest of the sun, Huillka-Umu, calls his attendant :

" Piqui-Chaqui, where art thou ?
PIQUI-CHAQUI.
I have slept like a stone,
And have dreamt bad dreams.

OLLANTA.

What ?"

Now Piqui-Chaqui has dreamt of an animal tied up ; but in the three editions of the drama the names of the animal do not agree : in Tschudi's edition it is an ass (*asnuta*), in Barranca's, a llama (*llamata*), in Markham's, a fox (*atocta*). To this confession Ollanta replies :

" Certainly thou art the animal."

Piqui-Chaqui, who is the clown in the play, seeing that his lord is angry, tries to pacify him with a joke. In Tschudi's edition, which makes him dream of an ass, he identifies himself with the said donkey :

" Therefore my ears grow longer."

In Barranca's edition he becomes the llama :‡

" Wherefore my neck grows longer."

In Markham's edition he says :

" Therefore my nose scents better ;
Therefore my ears grow longer."

Of the two lines, the first only is applicable to a fox ; the second can be understood of no animal except an ass. Had *atocta* been the true meaning of Valdez, the line—

" Therefore my ears grow longer,"

could not have been found in his manuscript ; for Valdez, in characterizing the fox, would not have given him the long ears which appertain to the donkey. Since it is found in the original manuscript, it is necessary to admit that the long-eared *asnuta* was named in the same manuscript. From this I conclude, first, that *asnuta* was the real reading, and that the first copyist of the work, Don Pablo Justiniani, or some other, meeting with a Spanish name of a Spanish animal in what he considered to be a pure Incasic drama, took it for a blunder, and substituted for it the Quichua *atocta*, a fox, with the joke corresponding to this change—

" Therefore my nose scents better ;"

or, again, that Valdez himself wrote two readings of the same passage, the one running thus :

PIQUI-CHAQUI.
Huc *asnuta* huatascata.
Of an ass tied up.
OLLANTA.
Ccanpunim chaycca ccarcanqui.
Certainly it thou art.

* Markham, *Ollanta*, p. 110.

† Barranca, *Ollanta* (Lima, 1868), p. 8.

PIQUI-CHAQUI.

Chaycha huiñancay rincipas.
Therefore my ears grow longer.

And the other :

PIQUI-CHAQUI.
Huc *atocta* huatascata.
Of a fox tied up.

OLLANTA.

Ccanpunim chaycca ccarcanqui.
Certainly it thou art.

PIQUI-CHAQUI.
Chaycha chuiñyan senccaypas.
Therefore my nose scents better.

Barranca's edition, if exact, gives a third version ; but then Barranca had not the opportunity of knowing Mr. Markham's manuscript. The two versions were probably condensed into one by the copyist.

2. In the notes, Mr. Markham indicates but two archaic forms which frequently occur in the drama ; one in the genitive-ending *c* or *cc* (*k*) in place of *p* or *pa* ; the other, the ending *chis*, *chiz*, instead of *chik*. In reference to the genitive-ending in *c*, *cc*, I must observe that some Quichua scholars consider it as more modern than the *p*, *pa* ending. Mossi, who remarks the fact, tries to explain it by saying that "the *p* of the genitive began to be pronounced like *pf*, then became *j*, which, as we have said, is written with *c* at the end of the words. This is the reason why the *p* became *c* : therefore in the common style of pronunciation they no longer write the genitive with a *p*, but with a *r* when the word ends with a vowel."* Mossi's explanation is, I think, inadmissible ; but from what he says, we must admit that *in the common style of pronunciation* the genitive-ending in *c* is now used, and not obsolete. As for the form *chis*, I have heard it pronounced *chiz*, with the *z* instead of the *s*, by the wandering *collas*, who, with their medicine-bags, penetrate as far as Buenos Ayres and Montevideo. The change of *c* into *z* at the end of the words is a dialectic peculiarity which is not confined to *chis* : in some parts of the Tucuman all the words ending in *c*, *k*, are pronounced as if they ended with *z*, *s* : *chau misa rurac padre* becomes *chau misa ruraz padre*, "the priest who has said half the mass;" *angel chac Diosta munac* is spelt *angel chac Diosta munaz*, "he who loves God as much as an angel."

3. In my review of Barranca's *Ollanta* I tried to show that "the social state depicted in *Ollanta* is not a heathen one : it is, in fact, a sort of conventional state, the outlines of which have been drawn by a writer who picked his science out of books, and did not possess more original documents than we possess at the present day." I must confess that, even after reading Mr. Markham's paper and translation, I have not altered my opinion, and therefore beg permission to refer the reader to my former paper for the exposition and development of my argument. As to Mr. Markham's objection, "that the only object of a Spanish priest in composing such a work would have been to inculcate Catholic doctrine, and not to preserve the memory of ancient pagan times," besides being a Spanish priest, Dr. Valdez was "the friend and adherent of the last of the Yncas." He might quite well have written a political play like *Ollanta*, with the object of placing before the eyes of the Indians a view of the former grandeur of their country, and exalting the power and generosity of the Incas, as other priests have written religious ones, like *Usca-Paucar*, to propagate the Catholic faith amongst the Quichua tribes.

Thus much for the controverted question of the genuine-

* Mossi, *Gramática de la Lengua general del Perú, llamada comunemente Quichua* (Suec, 1857), pp. 7, 8.

ness of *Ollanta*. As to Mr. Markham's edition, I cannot but highly commend the accuracy he has everywhere displayed in achieving a very difficult task. "The Quichua and the English are given in parallel columns. The different readings in the von Tschudi version, of which there are many, are given in italics, and the passages in my version, which are omitted by von Tschudi and Barranca, are also indicated," being included between brackets. In fact, it is the best and certainly the most critical work which has been published on the Quichua language and literature since the days of the old Jesuit grammarians.

G. MASPERO.

The Liflade of St. Juliana. By the Rev. O. Cockayne and E. Brock. Trübner and Co.

THE present publication of the Early English Text Society gives two texts in full on opposite pages, one from a British Museum MS. (Royal 17, A. xxvii.), the other from the Bodleian MS. 34, the former edited by Mr. Brock, the latter by Mr. Cockayne, each editor giving a translation of his text at the foot of the page. A later rhymed version from the Ashmole MS. 43 is given as an appendix; but the chief value of the book lies in the two earlier texts, which seem to be contemporary, although R. is full of omissions, and is altogether inferior to the Bodleian MS. In language and style the work bears the closest resemblance to the *Ancren Riwle*, *Hali Meidenhad*, and the lives of St. Margaret and St. Catherine, all of which Mr. Cockayne considers to have been written by Richard le Poor, bishop of Salisbury from 1217 to 1237.

As might be expected from the similarity of subject the Juliana has nearly the same vocabulary as the last named works. Still, it has several hitherto unrecorded words. An interesting example is the adjective *ēsluke* (p. 71)—"me leadde hire ant leac forð, ant heo wes ēsluke"—apparently an adjective formed on the analogy of the Old English *eaſynde*, &c. from *lucan* in its peculiar Middle English sense of "pull." The word is correctly rendered by Mr. Brock, "easy to lug," but Mr. Cockayne has "she was easily (led)," seemingly taking *ēsluke* as an adverb equivalent to the Old English *eāelice*, which would, however, appear as *ēsluke*, not *ēsluke*. The translations are on the whole very accurate, but some of the renderings require criticism. "Unwurð hit is me" (p. 15) is translated by both editors, "unworthy it is of me," but it seems preferable to take *unwurð* in the well-authenticated sense of "contemptible." Mr. Cockayne's translation of "pes were . . . pat tu hauest . . . se forð pi luue ileuet" (same page), as "to whom thou hast so far thy love committed," gives *forð* a very questionable interpretation: it seems safer to take it as meaning "henceforth," of which there are numerous examples in the older poetry. Mr. Cockayne translates "unreste unwhiltes" by "cunning evil ones" (p. 39), but there is no reason for departing from the usual meaning of the word, which is simply "worthless," "wicked." In the first line of p. 43, he translates "belzeebub þe balde purs of helle" by "B. the bold *portent* of hell," although it is not easy to see why he was not satisfied with "giant," which is Mr. Brock's rendering. In "settest for his sake all pat þe i worlt is" (p. 61), the rendering "settest" of both editors, is over-literal: the verb is constantly used in the Old English poetry in the sense of "create"—one of the examples given by Grein is, "of lame ic þe leoðo gesette," where the literal translation would be quite unmeaning.

In many parts of his version Mr. Cockayne has fallen into the common error of confounding translation with mere transliteration. Thus, "þen muchele witti witege ysae" (p. 39) appears in his version in the shape of "the great witty pro-

phet Isaiah," although "witti" means simply "wise," and conveys not the slightest idea of "wit." In the same way he translates "euch heafdes bikeoruen" (p. 67) by "carve off the head of every one"; "as beliales budel bet" (p. 59) by "as belials *beadle* bad"; and "seli meiden" (p. 47) by "seely maiden." This style of translation not only makes the old language ridiculous, but also exercises an injurious influence on English scholarship, by deadening the modern reader's perception of the changes (often very delicate) of meaning which many old words preserved in the present English have undergone.

HENRY SWEET.

The Harrowing of Hell. [Neue Bearbeitung des altenglischen Schauspiels. Von Dr. Eduard Mall.] Berlin: Th. Grimm, 1871.

ONE of the most striking characteristics of our time as compared with the past centuries is the change in the mode of studying literary monuments. Whilst an often rather narrow aesthetical horizon limited the researches of our forefathers to the classical periods of some few literatures, and whilst they either accepted as genuine the documents of these literatures transmitted to us in an often very disfigured shape or continued the process of wilful or unconscious alteration begun by the long series of their predecessors, our own generation has brought into prominence two new principles intrinsically linked together. The historical and critical methods of dealing with materials dominate at this moment in every branch of science, and have had the further effect of vastly increasing the number of the students of literature, by bringing to light not only a great number of almost unknown literatures, but also an immense quantity of highly important documents belonging to those already cultivated, and creating a totally new method for the re-establishment of the original form of literary productions. The activity of modern philologists is now mainly directed to two main questions: to the origin and successive development of the various branches of literature, and to the determination of true shape and form of the texts which have been preserved to us.

In both of these respects Mr. Mall's *brochure* on the oldest English "Mystery" is of great interest, and deserves our best thanks, though we differ from him in more than one essential point. Mr. Mall gives us a new edition of the *Harrowing of Hell*, printed twice already by Collier and J. O. Halliwell from a London MS., and once from the Auchinleck MS. by Laing and others.

The literary value of the *Harrowing of Hell* is clearly determined by the leading place it occupies amongst similar productions. It would be vain to ascribe to it great value from a purely aesthetical point of view. There is no originality of conception, the subject being taken from religious traditions, and having been treated poetically in England since the Anglo-Saxon period. We even possess a poem in this latter language in the latter part of Caedmon's paraphrase. Neither is there any artistic refinement, exquisite language, or elaborate characterization of the *dramatis personae*. The greatest merit of the poem is its entire simplicity. Dr. Mall with justice rejects the opinion of Mr. Th. Wright, who considers the *Harrowing of Hell* a mere dialogue; but he does not sufficiently appreciate the fact that the introduction to the poem preserved in one MS. (and that which Mr. Mall considers the best) calls our poem especially a *strif*. This would seem to indicate that we have to seek the origin of the drama, at least in England, in the large field of literature known by the names of "strif," "dispute," "debat," &c. For the *Harrowing of Hell* introduces Christ and Satan maintaining the justice of their respective causes, and has a distinct action as well as *dramatis personae*:

standing thus midway between the mere dialogue and the drama. If this view be correct—and it might be borne out by many English and foreign analogies—a new train would be given to the investigation of the origin of the drama which might be well worth pursuing.

Mr. Mall based his text on the two MSS. already published and a third preserved at Oxford, and supplies a complete *apparatus criticus* in the notes. The method adopted by him he has explained in an introduction at once sound and interesting. It is the first time, so far as I know, that the critical method, adopted in editing Greek, Latin, German, and Romance books, has been seriously applied to an English text. It is with no desire to depreciate the merit of the editor if I permit myself to differ from him in the way he has put his method in practice. I have already mentioned that the poem has been preserved in three MSS. Mr. Mall maintains that the Oxford copy (O) and the Auchinleck MS. (E) are derived from a common source, inferior to that from which the London copy (L) is drawn. He consequently takes L for the basis of his text, and rejects not only all readings preserved only either by O or by E, but also several readings common to both. An examination, however, of these latter has not persuaded me of their inferiority to those of L, consequently I do not accept the common origin of O and E. But further, after accurately examining the readings common to L and E, I have been convinced of the inferiority of several of them to the reading preserved by O; and this leads me to hold that L and E are copies of one common source differing from that of O; and that wherever O corresponds with either L or E, its reading is to be adopted. Without entering into a more detailed discussion, I would only add that with my view of the relation of the MSS. I regard it as a great advantage that the critical text should preserve far more faithfully the shape of the text as transmitted to us. Criticism ought to be always as conservative as possible. The reasons brought forward by Mr. Mall against the readings of O and E are, in my opinion, of no great importance, and are inapplicable to a literary production so far removed from artificial refinement. To give a single instance, vers. 139, 140. Mr. Mall adopts the reading of L:—

*I haue herd wordes stronge
Ne dar I her no lengore stonde.*

O reads:—

*Ich haue j herd wordes harde
Ne am ich namore zatewarde.
I herd wordes stronge
Ne dar ihc duellen er nout longe.*

E omits the two latter verses, and preserves only the two former, which are, on the contrary, wanting in L. Mr. Mall maintains rightly that the omission of the two latter verses are due to the scribe of E, considering the repetition of the same thought in two consecutive phrases as superfluous; but I do not see why the scribe of L may not have omitted the first two lines on similar grounds, the more so inasmuch as L offers several such omissions, as, e.g., after vers. 78, 149. The original contained, I believe, all the four lines as they are preserved by O. Prolix repetitions of this kind exist in all productions of the same period, and it is scarcely fair to apply a modern aesthetical standard to poems of the thirteenth century. However this may be, Mr. Mall's edition, offering, as it does, all the various readings of the MSS., enables every reader to select those which he may prefer. In establishing his critical text, Mr. Mall has also paid a minute attention to the linguistic aspect of the question, by making an accurate study of the rhymes. He establishes that the poem was written in the Midland part of England, that only E, the youngest of the MSS., has preserved this dialect with tolerable

accuracy, the other two offering all the characteristics of southern dialects. The difficult metrical question Mr. Mall has not touched, and though investigations into the metrical laws of a poem are always a great help for establishing the true text, it is hardly well to begin with so small a poem the almost uncultivated study of Early English metric. Subjoined to the text are some valuable critical and philological notes, and an excursus on the literary value of the poem.

EDMUND STENGEL.

Traité de Berakhoth du Talmud de Jérusalem et du Talmud de Babylone, traduit pour la première fois en français par Moïse Schwab. Paris : Imprimerie nationale.

M. SCHWAB, a name hitherto unknown in the field of Semitic or even of Hebrew literature, here presents us with an attempt at a French translation of the Talmuds of Berakhoth. He is certainly not without predecessors. A German translation of both Talmuds of Berakhoth was published by Dr. Rabe in 1777; another of the Babylonian Talmud of Berakhoth, with copious notes, by Dr. Pinner in 1842. Anyone who has read a few pages of these translations, or of those of Ugolini, will agree with us that the permanent value of their contents is not greater than that of the Brahmanas, and may be led to question whether it is worth while to translate the Talmud at all. In our opinion the Talmud ought rather to be excerpted on the plan of an encyclopaedia; a beginning has already been made by special works on its history, geography, zoology, medicine, &c. But if a translation be required, we must certainly stay our hands until M. Rabbinowitz has finished his collation of the Munich MS., and until the Vatican MS. has been thoroughly examined. A critical edition of the Arukh, the *Kamus* of the Talmud student, and the publication of R. Tanhum's dictionary of the Mishnah, still buried in the Bodleian, are also much to be desired. With these aids a body of really critical Talmudical scholars might perhaps undertake to translate the chaotic work known under the name of Talmud. Neither M. Schwab nor his collaborators (philologists, as he says, who are too modest to give their names) have any of the requisite qualifications. It is even more astonishing that the very scanty notes which are appended contain no reference to M. Rabbinowitz's *Variae Lectiones* on the Babylonian Talmud on Berakhoth, nor to Dr. Frankel's remarkable work on the history of the Talmud of Jerusalem. It is true that M. Schwab in his preface expresses regret that he had not met with the work in time. This is difficult to reconcile with the fact that the present writer's review of Dr. Frankel's book in the *Academy* (vol. i. pp. 191, 192) was rendered into French by M. Schwab in 1870.

The work under notice has already been condemned by the two leading Talmudists of France, M. J. Derenbourg, "membre de l'Institut," in the *Revue critique*, and by M. Trenel, Director of the Rabbinical School in Paris, in the *Univers israélite*; and we have not the slightest doubt that Dr. Geiger and Prof. Grätz will do the same, if they think it worth while, in their own periodicals. The verdict of these scholars is final, and the following remarks are merely added for the satisfaction of the readers of the *Academy*.

A pretentious but superficial and inaccurate preface opens the work. Its chief authorities are—not Zunz, Frankel, Munk, Krochmal, Rapoport, Luzzatto, Fürst, Geiger, Grätz, &c.—but three popular review articles. The bibliographical notes are devoid of references, and are most untrustworthy; thus the Basel edition of 1578 is mentioned (p. xlix) as the third, while it is really the sixth. Among translations, M. Schwab omits that of Rabe, which, though not famous, is certainly better than his own, and might have saved him

from numerous errors. "En dehors de la Mishnah," he says, "part minime et très-facile" (?), "on n'a traduit en latin que quelques traités fort courts de jurisprudence, et le docteur Pinner a fait une traduction allemande (qui laisse beaucoup à désirer) du premier volume de la série du Thalmud de Babylone." The truth is, there is a Latin translation by Ugolini of not less than sixteen treatises of the Talmud of Jerusalem (*i.e.* about half the collection, putting aside the Siphré, Siphra, and the Tosiftha), including *Z'ra'im*, a partial translation of which is announced *avec un cœur léger* by M. Schwab. It is clear that M. Schwab has formed no just idea of the difficulty of translating the Jerusalem Talmud, extant in a single bad Leyden MS., hybrid in language, and perhaps (see *Academy*, vol. iii. p. 117) a late compilation. A commentary on part of *Z'ra'im* in the Jerusalem Talmud has taken Dr. Frankel twenty-four years, and is not yet finished; what a contrast to M. Schwab! Much as the latter finds fault with Dr. Pinner's work, he has taken it for the basis of his own translation, except that he entirely neglects the notes, and sometimes misunderstands Dr. Pinner's rather peculiar German. We shall therefore pass over this part of M. Schwab's work, as it is not our present object to criticize Dr. Pinner.

It would be unreasonable to expect us to have tested every word of M. Schwab's version. We have done the same as his learned French reviewers, viz. opened the book at random and compared the rendering with the original. We thus lighted on the end of the 6th and the end of the 7th chapter, where the Talmud, speaking of thermal springs, mentions one in a place called "between the two palm-trees" (cf. the names of places compounded with the word "oak"). M. Schwab translates (p. 124), "C'est une eau qui coule de source entre deux palmiers." According to the Talmudic law, a bath for the purpose of purification must contain forty Saah (measures), and the question is raised whether the forty Saah could be said to be complete, if there were liquid sand at the bottom. M. Schwab renders (p. 126), "La chaux trempée" (?), "dit-il, sert à boucher" (?) "les fentes d'une baignoire." Here Rabe renders correctly, "Wie man dünnen wässerlichen Leimen mit der Tupe zusammenrechne, das Maass von vierzig Saah voll zu machen." On p. 452 we read, "Celui qui abandonne au ciel le jugement à prononcer sur le voisin." We should like to know what this can be except a literal rendering of Dr. Pinner's words, "Und wer da überlässt das Urtheil über seinen Nachbar dem Himmel"? Geographical words, and the names of the doctors of the Talmud, are generally misspelt, as M. Derenbourg has shown in the *Revue critique*.

The most valuable part of M. Schwab's work is, perhaps, the indices, which are unusually difficult to make for a chaotic composition like the Talmuds. AD. NEUBAUER.

THE MANUFACTURE OF INSCRIPTIONS AT JERUSALEM AND AL-ŞANĀ.

TO THE EDITOR OF THE ACADEMY.

SIR,—With reference to Dr. Socin's letters in recent numbers of the *Academy*, allow me to make the following statement.

I saw a few weeks ago a squeeze apparently taken from an inscription of twenty-one lines, each character being, if I remember rightly, about an inch and a half in length and a quarter of an inch in depth. The material was a piece of very coarse brown paper, several feet in length and breadth. This squeeze was accompanied by a letter, giving some particulars of the discovery of the inscription, &c., and by two or three small specimens of the stone on which it was said to be engraved, a very hard red porphyry. A copy was also sent at the same time of another inscription, partly in Phoenician and partly in Nabathean characters, said to be engraved on a pillar. Both are to all appearance forgeries. The writer of the letter, which was addressed to a distin-

guished British nobleman, was—M. Shapira, of Jerusalem. I wish that M. Ganneau would communicate to the readers of the *Academy* what he may chance to know of these matters.

As to Himyaritic inscriptions, many of the tablets that now come to us from Aden are forgeries. Such may, I think, be seen, for example, in the Museum of the Royal Asiatic Society. The offender in this case is a Jewish coppersmith at al-Şanā, to whom the well-known traveller, M. J. Halévy, very foolishly communicated some of the copies of inscriptions which he had taken. The mode of procedure, as made known to me by Baron von Maltzan, is very simple. One of Halévy's longer inscriptions is divided by transverse lines into four, and thus furnishes four bronze tablets, which are worth at Aden two or three pounds a piece. Himyaritic seals and other articles are also coming into the market there.

Let travellers and collectors therefore be very careful, and look with suspicion at every antique coming from Palestine or South Arabia.

W.M. WRIGHT.

Cambridge, July 9, 1872.

NOTE.

Herr M. Jordan writes to correct an error which slipped into our report of the Philological Congress at Leipzig (*Academy*, vol. iii. p. 239). The author of the paper on Greek reliefs was Dr. Richard Schöne, professor at Halle, not his brother, Dr. A. Schöne, of Erlangen, to whom we had attributed it.

Contents of the Journals.

Götting. gel. Anzeigen, May 22.—Frankel on the Targum of the Prophets; rev. by Nöldeke.—June 12.—Waddington's Greek and Latin Inscriptions of Syria; rev. by Nöldeke.—Benni's Tradition of the Syriac Church of Antioch; by H. E. [A defence of the papal supremacy by the archbishop of Mosul; chiefly valuable from its fragments of old Syriac hymns.]—June 26.—Sciaparelli's *Vocabulista in arabico*; by H. E. [The vocabulary is accompanied in the MS. by a composition in Arabic, which H. E. proposes to consider as a Sura, written in imitation of the Koran, to refute the Moslem argument from the sublimity of its style.]

Centralblatt, June 8.—Grill's critical edition of *Venissaphara*, and Boyd's translation of *Nâgânanda*; rev. by A. W.—June 15.—*The Indian Antiquary*, Nos. 1-3; and Notices and Catalogues of Sanskrit Manuscripts; rev. by A. W.

Monatsschrift für Gesch. u. Wiss. des Judenthums, June. (Philological.)—Miscellaneous notes on the Rabbinical language and antiquities; by J. Perles.—Karaite bibliography; by P. F. Frankl.—The double pronunciation of the Hebrew Resh; by Dr. Grätz. [Extracts from a MS. of the Bible at Cairo, and from Saadia's commentary on Sefer Jezira, from which it appears that the soft sound of R in conjunction with Z, S, D, T, TH, was not considered euphonious. Grätz suggests that Resh and Zain may have been related in sound; cp. the characters for them in Arabic. The Slavonic Z is pronounced like rsh. If R were so pronounced in certain cases in Hebrew, it could not well be combined with Z.]

New Publications.

KUDRUN. Herausgegeben u. erklärt von Ernst Martin. Halle : B. des Waisenhauses.

LE CLERC. Guillaume. Fergus, Roman von. Herausg. von Ernst Martin. Halle : B. des Waisenhauses.

MAIO, Angelo. Appendix ad opera edita ab. Continens quaerad scriptorum veterum poetica, historica, philosophica e codicibus collecta. Romae : Spithoever.

MÉLANGES GRÉCO-ROMAINS tirés du Bulletin de l'Académie impériale des Sciences de St.-Pétersbourg. Tom. II. Livr. 2. Leipzig : Voss.

NIGRA, Costantino. Reliquie Celtiche, raccolte da. I. Il Manoscritto irlandese di S. Gallo. Torino : Loescher.

RADLOFF, W. Die Sprachen der türkischen Stämme Süd-Sibiriens u. s. w. I. Abth. 4. Thl. Leipzig : Voss.

SCHILLER, K., u. LÜBBEN, A. Mittelniederdeutsches Wörterbuch. 1-tes Heft. A—Arnt. Bremen : Kühtmann's Bchg.

SEELISCH, R. De casuum obliquorum apud Valerium Maximum usu Liviani et Tacitei dicendi Genesis ratione habitâ. Diss. Münster : Mitsdörfler.

THIELE, R. Prolegomena ad Hymnum in Venerem Homericum quartum. Halis : Typ. Orphanotroph.

TREITEL, Leop. De Philonis Judaei Sermone. Dissertation. Breslau : Schletter.

ERRATUM IN No. 51.

Page 258 (a), line 2, for "Ramiero de P. Caballero Infante y Quaro" read "Francisco de P. Caballero Infante y Zuazo".

THE ACADEMY.

"INTER SILVAS ACADEMI QUARRERE VERUM."

Vol. III.—No. 53.

Readers are reminded that the mention of New Books, Articles, &c., in our lists is intended as a guarantee of their importance. The Editor of THE ACADEMY cannot undertake to return communications which are not asked for.

The Editor cannot reply to questions from authors respecting the notice of their books.

The next number will be published on Thursday, August 15, and Advertisements should be sent in by August 12.

General Literature.

The Pretenders; a Norwegian Drama. [*Kongs-Emnerne*; historisk Skuespil. Af Henrik Ibsen. Tredje, gjennemsete Udgave.] Copenhagen.

THIS saga-drama comes to us almost as a new work, for the original edition, published at Christiania in 1864, won for itself little beside local reputation, and has long been out of print. Since that year, however, the fame of its Norwegian author has most rapidly increased; two separate translations of this very poem have appeared in Germany, and a revised and almost rewritten edition of the original is sent forth by the leading publisher of Copenhagen. Ibsen has been very slow in gaining maturity; almost a contemporary of the well-known B. Björnsen, the latter writer, though younger, far outstripped him in precocity; but while some of Björnsen's earliest works are the best he has produced, Ibsen has steadily risen in power and scope, till his last dramas exceed in ability anything that his rival has done or is likely to do. The literary life of Ibsen divides itself into two very distinct periods; the earlier of these may be termed the historic, and the dramas that developed themselves in it were all founded upon incidents in the chronicles of mediaeval Norway; of these the one under review was the last, and unquestionably the best. The later period may be styled the polemical or satirical, and the poems which belong to it are all lyrical dramas attacking various follies in the Scandinavian society of to-day. The first of these was *Kjærlighedens-Komedie*, "Love's Comedy," published in 1863. The two periods accordingly overlap one another.

Kongs-Emnerne, "The Pretenders," or, to be literal, the "materials out of which to make a king," has for its theme the struggle for the vacant throne of Sverre, in the first half of the thirteenth century. This epoch, the most romantic in saga-history, has been a favourite with the northern poets, from Ohlenschläger down to Björnsen. In this case, the time is chosen which immediately followed the death of King Sverre. A troop of claimants clutched at the falling crown, but two stood out above the rest, and drew the eyes of all men upon them, Hakon Hakensson and Skule Bårdsson. Between these the choice really lay; Hakon was putative son of Sverre, and Skule brother of an earlier king. Ibsen's drama begins with a scene in which all the heads of the nation, gathered before Bergen Cathedral, wait for the ordeal of hot iron to decide whether Hakon is truly Sverre's son or no. The ordeal declares in the affirmative, and Hakon, so assured by heaven, gains perfect confidence in himself, and in the justice of his cause, while Skule doubts and hesitates. Thus the keynote of the poet's estimate of each character is struck at once: Hakon's strength is his

VOL. III.—NO. 53.

calm self-sufficiency, as Skule's weakness is his vacillating self-mistrust. Hakon becomes king, does everything to conciliate Skule, makes him duke, marries his daughter, but to no avail. In Skule there is ever the same fiery craving for equality with Hakon, for the name and right of king. But, while Hakon possesses to an eminent degree the good fortune and august bearing of an old-world king, Skule, as his rival says, "has all superb gifts of intellect and courage, is made to stand nearest to the king, but never to be king himself." Hakon's great new idea is to make Norway not a kingdom only, but a nation, to break down provincial feuds, and make the people one and indivisible. How Skule plagiarises this idea, finds it gives him a power over men's hearts that no thought of his own ever gave him, how by its help he rises to brief kingship through much blood, and falls at last before the innate power of will that makes Hakon king by every right human and divine, can only be roughly indicated here. The main characters are drawn with great subtlety and finish, and are relieved by the delicate portrait of Queen Margaret, wife and daughter of the rivals, and by that of Bishop Nicolas, a crafty and witty priest, utterly selfish and unprincipled, but devoted to the interests of his church. The dramatic power displayed in this poem quite raises it out of any mere local interest, and gives it a claim to be judged at a European tribunal.

The original publication of *Kongs-Emnerne* was hampered by the coeval appearance of a play, *Hertog Skule*, on the identical subject, by the popular poet, A. Munch. It was as when Mr. Morris' *Defence of Guenevere* immediately preceded the *Idylls of the King*. At first, Munch's piece was naturally received with higher applause than Ibsen's, but time has already worked its revenge for the younger writer. Munch's drama is graceful and correct, but possesses nothing of the piercing insight into human passion that *Kongs-Emnerne* displays. The latter work is not written in verse, but in very simple, stately prose. One wonders that a poet with such a gift for flexible versification as Ibsen has proved himself to have should have been contented with prose; still, prose is far better than the pompous metre in ancient Pistol's vein that clothes most modern tragedies. Here and there a little lyric, like a jewel, breaks the dialogue. I miss, with regret, one that used to adorn the last act, when the women rejoice over Skule, as he goes to his death, roused into heroism at last.

The spelling of this edition is quite new and curious. It has evidently been the result of an interesting experiment, an attempt to break down the slight but exasperating barrier between the Dano-Norwegian and the Swedish languages. In this book Ibsen, writing Danish, spells it as much as possible like Swedish; the capital letters, commencing nouns, are dropped; all mute vowels are thrown out. For instance, the Danish *giöre* is spelt *göre*, that it may approximate the Swedish *göra*. If the languages could be induced to meet one another halfway after this fashion, it would wonderfully simplify the study of Scandinavian literature. At present the two languages repel a student with a double difficulty; and, as if this was not enough, a fanatical clique of Norwegian writers is trying to found a third tongue there.

EDMUND W. GOSSE.

Poems of Albert Möser. [*Nacht und Sterne*. ("Night and Stars.") Neue Gedichte von Albert Möser.] Halle: Barthel.

THERE are two of the later German poets—R. Hamerling and A. Möser—who attract in an especial degree the attention of their countrymen, and it is to the most recent work of the latter that we wish to call the attention of the English public. The first collection of Möser's poems appeared in

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1865, and a second edition, enlarged, in 1869, both of which were warmly received by those qualified to appreciate the largeness of the poet's views, his fervid enthusiasm for all beauty, and his wonderful mastery of form. His *Neue Gedichte* possess these qualities in a still more eminent degree; they show us the poet's inmost nature; we clearly perceive the soil where his poetry grew, the elements whence it derived its nourishment. Möser draws his inspiration from classical literature; his poetry is saturated with the spirit of antiquity. The hymns especially remind us of the choruses in the ancient tragic poets; in the absence of rhyme the idea develops itself more freely, and the rhythm rises and falls in harmony, so as to give its full and just expression to the thought, which, with Möser, is generally predominant over feeling, and chiefly occupied with philosophical contemplation of the universe. Borne on "melancholy wings of thought," he struggles

"To solve the enigma
Of the sphinx of the worlds,
To fathom the primaeval
Eternal mystery of life."

The poet is a disciple of Schopenhauer—like Hamerling, the author of *Der König von Sion, Ahasverus in Rom, &c.*—and his prevailing mood is one of melancholy reflection on the nothingness, the fleetingness of existence—"since nothing is constant but change"—the painful fragmentariness of human life and action, the misery of existence, and the sufferings of mankind. But all these different elements are outweighed by a passionate admiration for all that is beautiful, whether a living woman, or an antique marble goddess; for he never craves to possess what he admires so fervidly; his longing for the ideal is disinterested, for he has felt that the object of our struggles loses its charm as soon as it is won, and that the absolute beauty after which the poet aspires is to be found nowhere but in his own bosom.

Poetry, the power of expressing the love which burns within him for all that is noble and good, and the objects which kindle these sentiments, these are the poet's stars in the gloomy night of existence. The songs and hymns sometimes remind us of Heine by the gracefulness of their form. A canzone, "Sacrifice offered for the Dead," noble in form and substance, is dedicated to a fallen friend and pupil, as well as a short cycle of deeply felt poems, where, however, one line of the burden, "Poor lad, poor lad!" is poor, and weakens the general effect. A succession of graceful-sounding *Ghazelen* is nevertheless not wholly satisfactory: the deep earnestness of the poet's mind does not harmonize with the playful verse; the thought is too weighty for its vehicle, and the consequence is an apparent artificialness in the whole. The true character of the *Ghazel*, which, by a continually recurring repetition of rhymes and images, aims at exciting one lasting sensation with scarcely perceptible variations, is missed. Sonnets of perfect finish, and spirited distichs, of which a few are graceful imitations of the antique, conclude this volume, which in euphony and harmony far surpasses everything that later German poets have produced, and is only exceeded by Goethe and Heine, who touch by a simplicity so nearly akin to nature that they make us forget how much of it is due to art.

M. BENFEY.

Erewhon; or, Over the Range. Trübner and Co.

SINCE the time of Gulliver the description of fictitious societies has been a favourite medium for satire on the existing, and the rapidity of progress in both inventions and ideas has made such works especially popular of late. To make such a *jeu d'esprit* effective, a writer must have not only satirical power, but also a vivid and accurate imagination.

In *The Coming Race* the fiction was ingenious, picturesque, and well sustained, but the satire was slight: in *Erewhon* the invention is slight, and wants those touches of definite imagination which give reality. The introductory chapters, indeed, which describe the hero's adventurous journey over the range which separates Erewhon from the known world are very well written: within the realm of reality the author's imagination does not fail him; but no sooner has the hero reached the wonderful region in which our interest has been aroused than all is either familiar or indefinite. Erewhon (Nowhere) and its people are very like England and the English; we are told that everything differs a little from its European counterpart, but the features of that difference are not presented to the imagination. In Erewhon many habits and opinions are the reverse of ours, like the name of the place, but that is all; nor is this principle carried out thoroughly. In short, the fiction is so slight that, instead of stimulating interest, it overlays the satire with an irritating vagueness. The Erewhonians worship the goddess Ydgrun, who differs in no way, except in the arrangement of the letters, from Mrs. Grundy: indeed, by an amusing slip, the name is once printed Grundy. They profess an attachment, which they do not feel, to certain institutions, of which no definite conception is presented to the reader, called "musical banks;" these are, in plain English, churches, and their "cashiers" are ministers of religion. The Erewhonians subject their children to what is called the "birth-formula:" under this alias the usual arguments against infant baptism are adduced. They worship personifications of justice, strength, &c.: by this device the belief in the personality of God is somewhat feebly satirised. A passage about the "cashiers of the musical banks" will show how slight is the imaginative element:

"In fact it was a career from which retreat was virtually impossible, and into which young men were generally induced to enter before they could be reasonably expected, considering their training, to have formed any opinions of their own. Few, indeed, were those who had the courage to insist on seeing both sides of the question before they committed themselves to either. One would have thought that this was an elementary principle—one of the first things that an honourable man would teach his boy to do, but in practice it was not so. I even saw cases in which parents bought the right of presenting to the office of cashier at one of these banks, with the fixed determination that some one of their sons (perhaps a mere child) should fill it."

One can see no reason why these things should not have been said of English parsons instead of Erewhonian bankers, except that it would then be seen how commonplace they are.

The most interesting part of the book is that which advocates (apparently) the theory that what we call moral vice is but the result of nature and circumstances, and therefore ought not to be subject to moral reprobation. The Erewhonians pity moral vice, but punish physical. The swindler is handed over to the doctor, and his friends enquire after his progress with tenderest solicitude, but the culprit who is convicted of consumption is scouted by his friends, and imprisoned with hard labour for the rest of his life. Yet these people recognise the same moral distinctions as we do: for they perceive an advantage in honesty, and condole with the dishonest; and what advantage has honesty over dishonesty except the moral one? The author has attempted to describe what cannot be conceived—persons who recognise the distinction of right and wrong, and also that of praise and blame, yet do not praise the right, or blame the wrong. To make his fiction conceivable, either the Erewhonians must have no moral ideas, but regard all vice, physical and moral, as disease—awarding neither praise nor blame to either—or they must bring all vice into the moral categories, and punish both for illness and for sin. The

former is probably the author's real meaning, that all vice is disease, and that, accordingly, we ought to have no moral ideas. How does he propose to get rid of them? On the whole this is not a very powerful statement of the medicinal theory of punishment.

There is a chapter on universities, and an ingenious speculation on the possibility of machines developing into rational beings; here and there we meet with a poor joke, or a bit of doubtful Latin, but it is a dull book throughout.

R. S. COPLESTON.

LITERARY NOTES.

La Crónica de los Cervantistas, of which four numbers and a supplement have been issued, is the fruit and the sign of that remarkable revival of interest in Cervantes and his works which is just now so active in Spain. According to the prospectus of the editor, Don Ramon Leon Mainez, it is intended to be a faithful echo of all the admirers of *El Príncipe de los Ingenios*, a medium for the interchange of opinions and ideas relating to his life and works, and a storehouse of criticism and illustration on all points connected with Cervantine literature. The publication fairly fulfils this promise, although we cannot help wishing that a better proportion had been kept between the critical faculty and the patriotic spirit, between the facts and the raptures. The first number, dated appropriately the 7th of October, the anniversary of the battle of Lepanto, contains, in addition to glorifications of him who to all Spaniards is the hero of that day, an article by Don José María Asensio, one of the most eminent of Cervantistas, refuting the notion of the biographers, that the allusion to "Filena" in the *Viage al Parnaso* is to an early poem now lost. Señor Asensio shows that "Filena" is a misprint for "Silena," a name which occurs in the *Galatea*, and is a reference not to a poem but to a mistress—the object of Cervantes' Portuguese amour, and the mother of his daughter Isabel. Señor Mainez himself contributes an article devoted to the superfluous demonstration against one Sbarbi, a priest, that Cervantes was no theologian. The second number contains, besides Sbarbi's answer, a record of all the honours intended to be paid to Cervantes on the anniversary of his death in the various towns of Spain, and a useful bibliography of minor works relating to the author of *Don Quixote*, by Don Cayetano Alberto de Barrera. There is a monograph, by the geographer Fermín de Caballero, on the country of *Don Quixote*, proving that his place of birth was Argamasilla de Alba, and not any other of the numerous towns which have contended for the honour. Don Manuel Cervantes Peredo pronounces on the "hidden meaning" of his namesake, that there is no hidden meaning—that in *Quixote* "all is exoteric and nothing esoteric." The third number continues the account of the anniversary celebrations and Barrera's bibliographical notes, and introduces an English Cervantist, Mr. A. J. Duffield, who asks for help from Spanish scholars in overcoming some difficulties in the text of *Don Quixote*, with a view to a new English translation. The religious and literary functions which were performed on the 23rd of April in honour of Cervantes form the especial subject of a black-bordered supplement. In the fourth and last number is a tribute, by the editor, to the memory of Fray Juan Gil, the Redemptorist, to whose courage and devotion Cervantes was mainly indebted for his release from captivity in Algiers. Don Leopoldo Ruis writes, with needless severity, of a foolish continuation of *Don Quixote*; and Don Francisco Lopez Fabra enumerates the editions of the immortal work which have appeared in all languages, reckoning 87 in Spain and 191 in other countries; to which Don Manuel Cerda adds an elaborate collation of the first editions of the *Galatea* and the *Quixote* in Spanish.

The *Allgemeine Zeitung* (July 10) communicates to its readers some passages from the autobiography of Grillparzer, which will form the tenth volume of his collected works. It promises to be of much interest, for, though not a friendly, Grillparzer was a very intelligent critic of the many fashions in literature which he lived to see begin and end: as a case in point we may cite his remarks on the tendency of artificial unanimity to lead to over-

frequent changes of popular taste. His account of the treatment of *König Ottokar* by the censorship is curious; his pilgrimage to Weimar, on the other hand, was not very different in result from others we have read of. His estimate of his own merits is very simple: "the best of those who have come after Goethe and Schiller," but he himself did not mean this as high praise.

The *Deutsche Reichszeitung* has brought down on itself the wrath of all admirers of Goethe by some rash and quite unproved assertions and insinuations to the discredit of Frederika Brion, which profess to rest on continuous Sesenheim tradition. Goethe's defenders declare that so far as any tradition reflects upon Frederika, it is one which connects her name with that of the Roman Catholic curate of Sesenheim, some time after Goethe's departure from Alsace. But what is far more certain than either scandal, and fatal to both, is that Frederika and her love affair were completely forgotten in Sesenheim when the third volume of *Wahrheit und Dichtung* appeared, and made her home a place of pilgrimage, where of course the faithful were regaled with traditions according to their tastes.

M. Th. Bentzon begins a series of sketches of American humorists with an account of Mark Twain in the *Revue des deux Mondes* (July 15). His criticisms are quite unexceptionable, but he seems to have been misled by the advertisements of a certain type of publisher, so that he exaggerates the popularity of his author, while expressing surprise at its extent.

Art and Archaeology.

NEW FRAGMENTS OF THE FRIEZE OF THE PARTHENON.

IT is now about twenty years since, in a letter printed in vol. v. N. S. of the *Transactions of the Royal Society*,⁽¹⁾ I drew attention to the fact that, scattered about in various places on the Acropolis at Athens, were small fragments of the frieze of the Parthenon. In the valuable work on that temple recently published by Professor Michaelis (see *Academy*, vol. ii. pp. 412-414), he has very happily adjusted several of these fragments to their places on the frieze. There are, however, on the Acropolis, a number of other fragments of the frieze which Professor Michaelis never saw, and which have been lying about the Acropolis for many years so intermixed with fragments of other sculptures that it has been no easy matter to pick them out. This has been recently done by Signor Martinelli, a Swiss formatore resident at Athens, by whom casts of these fragments have been made for the British Museum. On confronting these casts with the slabs of frieze in the Elgin Room, I have succeeded in adjusting to their original places the fragments noted in the subjoined list, the references in which are to the plates of Michaelis.

(1) The most important of these fragments is one which connects the horses, xxi., with the charioteer and his *apobates*, xxii. in plate 12, whereon is represented the part of the procession on the north side of the temple nearest the east end. The new fragment is evidently the one which I saw on the Acropolis in 1852, and which I describe in my letter already referred to as "A fragment of the frieze consisting of the tails of two horses, and the front rail, *avrof*, of a chariot." The right hand of the *apobates*, xxii. 65, rests on the rail. It will be seen by reference to Michaelis that the right-hand corner of the same slab was broken away when Stuart drew it. One of the new casts, however, supplies this missing corner, on which are, of course, the remaining forelegs of the four horses. It is interesting to observe that this composition of two chariots, xxi.-xxiii., has only been recovered since the publication of the work of Michaelis. The two fragments which form the upper part of xxii. long remained in the Museum as isolated fragments, and are published as such in the *Museum Marbles*, viii., frontispiece.

(2) In plate 12, x., a new fragment supplies the feet of figure 38, and some of the drapery of No. 37, which is divided in half here by the joint.

(3) In the eastern frieze, plate 14, viii., the head of fig. 61 and the faces of 58, 59.

- (4) *Ibid.* vii. 49, right foot of male figure at corner of slab.
 (5) *Ibid.* iii. 19, feet of male figure.
 (6) In the south frieze, plate 11, the remainder of the chariot-wheel, part of which is shown in xxix. 71.
 (7) *Ibid.*, remainder of the chariot-wheel shown in xxv. 61.
 (8) *Ibid.* plate 10, xvii., forefeet of horse 45, and part of hind-quarter of next horse.
 (9) *Ibid.* xix., upper left corner of slab showing horse's mane.
 (10) Western frieze, plate 9, xiv. 26, the right-leg of the figure on the left. This leg was missing when Carrey drew this slab.
 In plate 12, iii., Michaelis gives a fragment of the forelegs of the cow, and the legs of fig. 7, with which he combines the legs of fig. 8. A fragment of a cow's hindquarter broken in two pieces probably belongs to this group, and I am disposed to add the hindlegs given by Michaelis, plate 13, xxvii. D, though no actual adjustment of these two fragments one to another can be made from the casts. If the fragment with the hindquarter is rightly attributed, the length of the next slab, iv., may be approximately fixed, for immediately behind the hindquarter the marble is cut for a joint.

Of the fragments I have here enumerated, several might have been long since re-united to the slabs still remaining on the Acropolis to which they belong, if the sculptures now lying about there had been collected into one place, and examined by some one experienced in putting together ancient sculpture. The composition of the frieze of the Parthenon is so precious that no amount of labour or expense should be grudged which can tend to the recovery of the missing groups.

Considering the length of time during which the pieces recently united to the frieze have remained unexamined at Athens, we cannot feel sure that every extant fragment of it is known. It is matter of notoriety that at the time of Lord Elgin's visit, travellers were in the habit of carrying off such portable fragments of the frieze as they could obtain, and there is clear evidence that more than one slab was barbarously mutilated for this purpose. Among the morsels so carried off were (1) the fragment which so long lay unknown at Marbury Hall, where it was discovered by Mr. George Scharf in a box under the staircase, and generously presented to the Museum by its owner, Mr. Smith Barry; (2) the fragment so long preserved in the Villa Cataio, and now in the possession of the ex-grand duke of Modena; (3) the head purchased by the British Museum at the Poutalès sale; and (4) the head at Karlsruhe (Michaelis, plate 13, xxvii. B). Who shall say how many more such precious relics still sleep in the oblivious dust of private collections?

C. T. NEWTON.

ART NOTES.

M. François Forster, one of the most distinguished engravers of the French school, died recently at Paris, at the advanced age of eighty-two. M. Forster was the intimate friend and compatriot of Léopold Robert, and many interesting details concerning him and his earlier life will be found in the "Correspondance inédite de Léopold Robert" which M. Charles Clément is at this moment bringing out in the *Gazette des Beaux-Arts*. Amongst his principal works may be cited the "Vierge au bas relief," after Leonardo da Vinci; "Sainte Cécile," after Paul Delaroche; "Enée et Didon," "Aurore et Céphale," after Gros; and the "Trois Grâces," "Vierge à la légende" and others, after Raphael, his favourite painter.

M. le Baron Cloquet has recently presented to the Louvre collection one of the finest pieces of Palissy ware in existence. It is a very large oval dish. The border is composed of foliage; in the centre lies a lobster holding in its claws a dying fish. The state of its preservation and the perfection of its enamel leave, it is said, nothing to be desired by the most fastidious amateur.

The statue of Ronsard was inaugurated at Vendôme on the 23rd of June. It is the work of M. Irvoy, professor of sculpture at the art-school of Grenoble.

We learn from the *Chronique des Arts* that the administration of the Louvre have recently acquired a very good picture by

Poterlet, an almost unknown painter who died at Paris in 1835, at the early age of thirty-two. The subject of the picture is the dispute between Trissotin and Vadius in the *Femmes savantes*.

A very fine collection of English medals has been recently purchased by MM. Rollin and Feuardent, the well-known Parisian antiquaries.

A memorial to Winckelmann has been erected in the hall of the staircase of the Japanese Palace at Dresden. The memorial consists of a bronze portrait medallion in relief, by Broßmann; the marble tablet which forms the background was executed from a design by Richard Steche. The memorial was solemnly uncovered in commemoration of the hundredth anniversary of Winckelmann's death, which occurred June 8, 1768.

The art-school for women at Munich has just been voted a yearly subvention of 6000 florins by the Bavarian government.

Wilhelm v. Kaulbach is at work on a new composition, "Die Verfolgung der Christen unter Nero," which is said to be of a very high order of merit. At Munich the restoration of the frescoes by Professor Rottmann under the Hofgarten arcades is going on but slowly, and seems likely to be a work of some years. Professor Zumbusch has now completed the last and principal figure for the national memorial to King Maximilian II. The work has been largely visited in the professor's atelier, and has excited great admiration.

The *Zeitschrift für bildende Kunst* for July contains a very spirited etching by W. Unger, after a Poussin in the Cassel Gallery. The subject is "Satyrs and a Bacchante"; the composition is full of animation and swing, but we miss the refinement of charm usually characteristic of Poussin.—Carl Justi contributes in the same number an article on "Philip von Stosch und seine Zeit," which will be found worth reading by all who take an interest in the movement of antiquarian research going on in Italy during the first half of the last century.—Phil-Sylvanus concludes his notice of the designs for the parliament houses of Berlin.—"R." calls attention to the wholesale destruction of old Nuremberg which is now going on: he says that now that the official rage for pulling down has once begun its brutal work in the outer part of the town, it is fast pressing towards the centre—the White and the Lauferschlag towers are to be the next sacrifice.

"Denn alles, was entsteht,
Ist werth, dass es zu Grunde geht."

H. Ludwig contributes an essay on the possible use of petroleum in oil-painting.

The Print Room at Dresden has just received an exceedingly important and valuable gift. Geheimrath Dr. Müller, who is well known as a zealous amateur, has presented 178 drawings by modern masters, the best and most valuable of his magnificent collection of modern drawings. With the exception of some drawings by D. Chodowiecki (the engraver of "Les Adieux de Calas," 1768; but perhaps best known by his twelve illustrations of Clarissa Harlowe), all these drawings represent the school which begins with Carstens. From his hand there is a drawing of the "Four Seasons." There are also examples of Thorwaldsen, Reinhardt, Koch, Cornelius, Overbeck, Veit, Führich, Steinle, Delaroche, Léopold Robert, Calame, Callow, Copley, and others.

The American painter and poet Thomas Buchanan Read died at New York on the 11th May last. Mr. Read is best known by his paintings of "The Lost Pleiad," "Undine," "The Star of Bethlehem," and his portraits of Longfellow's children, of General Sheridan, and Mr. Peabody. A complete collection of his poems appeared in 1860.

The Institute of Painters in Watercolours has just been deprived by death of a valuable member, Mr. Henry Tidey, elected in 1858. He early distinguished himself as a portrait-painter, but has of late devoted himself entirely to poetic subjects. His "Feast of Roses" was purchased by the Queen, and "Dar-

thula," by the Duke of Manchester. He took a lively interest in all theoretical questions connected with his art, and was recently nominated vice-president of the Society for the Encouragement of the Fine Arts.

The *Times* of Monday, July 22, under the heading, "Temple of Diana at Ephesus," contains a summary of the report made to the Dilettanti Society by a committee chosen out of its own members, on the results of the recent excavations at Ephesus. Mr. Wood obtained the first clue in exploring the great theatre at Ephesus by the discovery of an inscription laying down the route by which, on the birthday of the goddess, her treasures were to be carried in procession from the temple to the great theatre, and back to the temple through another city gate called the Magnesian. Mr. Wood soon discovered one of the two gates. From it issued an ancient road flanked by sepulchral monuments of the Roman period. The line of this way pointed to a north-east direction, and outside another gate near the Stadium a second road was discovered, converging towards the one already partially traced. Following these converging tracks in April, 1869, Mr. Wood struck upon the wall enclosing the *peribolos* of the temple, at an angle in the masonry of which was inserted in duplicate an inscription in Greek and Latin, stating that the emperor Augustus, out of the revenues of the goddess, had rebuilt the *peribolos* wall round her temple. After tracing the two lines of wall a short distance, all sign of them was lost, and the temple had to be sought by sinking pits within the presumed area of the *peribolos*. Here the alluvial soil ran deep, averaging 22 feet above the ancient surface. At length, in April 1870, Mr. Wood came upon a pavement of white marble, on which were lying fragments of ancient sculpture. These remains were found 18 feet below the surface; immediately above the pavement was a stratum of splinters of white marble, partially calcined by fire. As the area of excavation was enlarged on this spot, remains of Ionic architecture cropped up everywhere. In February, 1871, part of the lowest drum of a column 6 feet 1 inch in diameter was found in its original position. To this succeeded, in the autumn of 1871, the discovery of another drum nearly entire, on which was sculptured a group of male and female figures. Fragments of two more sculptured drums, a pilaster with a fine group in high relief, capitals, bases, and drums of columns, were lying in heaps at the bottom of the excavation at the close of the year 1871. The *Caledonia* was promptly despatched by the Admiralty, and took on board upwards of sixty tons of marbles in January last. Since the beginning of the year Mr. Wood has made ready for carrying on further works in the autumn. The question now is, how far is the nation disposed to aid him in this gigantic undertaking? Is this enterprise so important, and hitherto so vigorously conducted, to be left to languish for lack of sufficient funds at the very moment when its prospects are most brilliant?

The paintings executed by Hans Makart for the dining-room of Herr Nicolas Dumba (see *Academy*, vol. iii. p. 26) will not, we hear, fill the situation for which they were intended, but are still in the market.

The Roman burying-place discovered at Ratisbon in the course of excavations for a railroad continues to yield a variety of curious and interesting objects. A large glass urn containing a gold filigree ring with pearl attached has been found, and, what gives rise to more speculation, a separate burying-place for horses, or some other animal, whose bones are found upon a thick layer of egg-shells; an urn on the same spot contained two eggs in an almost perfect state of preservation.

The first volume of Dr. Hermann Grimm's *Life of Raphael* is now ready for the press, and will shortly appear in print.

A correspondent writes to us from Cassel, where the yearly meeting of the General Society of German Musicians took place a short time ago. The chief aim of this society and of the concerts connected with its meetings is to introduce the works of young composers to the public, and the programmes of its performances consist chiefly of the representative work of the rising generation. This fact explains the general tendency towards the "future," the more so as the society counts amongst

its members one of the leaders of the progressive movement, Franz Liszt. The oratorio of *St. Elizabeth*, by this composer, was the most important work of this year's concerts, and the presence of the master himself made the whole appear almost in the light of a Liszt festival. Still we notice also the names of the chief representatives of other schools, e.g. Brahms and Rubinstein, in the programme. Amongst the new orchestral works of importance our correspondent mentions particularly an overture by Severin Svendsen, a young composer of Norwegian birth, but educated at the Leipzig conservatoire, and imbued with the spirit of the best German masters. He is well known to the musical public in Germany by a symphony and numerous compositions of chamber music. The present work is a symphonic introduction to Björnster-Björnson's tragedy of *Sigurd Slembe*, and the character of that hero is said to be rendered by the composer with unusual dramatic power and melodious beauty. The work was received by the public with great enthusiasm.

New Publications.

- DESNOIRESTERRES, G. La Musique française au XVIII^e siècle. Gluck et Piccinni, 1774-1800. Paris : Didier.
- GAEDERTZ, Th. Hans Holbein der Jüngere u. seine Madonna d. Bürgermeisters Meyer. Mit den Abbildgn. der Darmstädter u. der Dresdner Madonnen. Lübeck : Bolhoevener.
- GERVAIS, E. Lessing's Kritik üb. die dramatische Poesie. Berlin : Calvary. (Königsberg : 1871.)
- HAMANN's, Johann Georg. Schriften und Briefe. Im Zusammenhang seines Lebens erläutert und herausgegeben von Moritz Petri. Erster Theil. Hannover : C. Meyer.
- ILG, Albert. Ueber den kunsthistorischen Werth der Hypnerotomachia Poliphili. Ein Beitrag zur Geschichte der Kunsliteratur in der Renaissance. Wien : Braumüller.
- KUH, E. Zwei Dichter Oesterreichs : Franz Grillparzer—Adalbert Stifter. Pest : Heckenast.
- PERVANOCGLU, P. Das Familienmahl auf altgriechischen Grabsteinen. Eine archäologische Untersuchg. Leipzig : Engelmann.
- WACKERNAGEL, W. Geschichte der deutschen Litteratur bis zum dreissigjährigen Kriege. Supplement. Basel : Schweighauser.

Theology.

THE POSITION OF THE SYNOPTIC QUESTION.

The Gospel of St. Mark and its Synoptic Parallels. [Das Markusevangelium und seine synoptischen Parallelen, erklärt von Dr. Bernhard Weiss.] Berlin : Hertz.

IT is almost ten years since the present reviewer published a work on the synoptic gospels, in which the theory was maintained at some length that their common root is to be found in "the gospel according to Mark." The current of critical opinion continues to flow in that direction, though it is fair to mention that some eminent theologians represent an opposite tendency in favour of Matthew. Mark, either in its present or in an earlier form, is generally accepted as the foundation, and a collection of sayings and discourses of the Messiah ascribed to Matthew as an important source, of the synoptic literature. This view was at once adopted by writers of such various theological positions as Weizsäcker, Schenkel, and Wieseler on the Protestant and Sepp on the Roman Catholic side. Since 1863 (Ewald, Meyer, Bunsen, Volkmar, Ritschl fall earlier) the priority of Mark has been accepted by Renan, Hausrath, Uhlihorn, Ueberweg, not to mention less known writers. Wittichen's essay, "On the Historical Character of the Synoptic Gospels" (*Jahrbücher für deutsche Theologie*, 1866, p. 427, foll.), may also be added, inasmuch as it distinguishes the now existing from the original Mark only by the absence of that Jewish colouring which made the gospel unsuitable for Gentile readers. The substantial agreement of Wittichen with the present writer is still more evident from his supposition of a second record, in order to account for the common element in Matthew and Luke.

Another class of critics maintain the priority but not the originality of Matthew, *e. g.* in England Sir R. Hanson in *The Jesus of History*, who maintains that this gospel has passed through various stages, from the collection of λόγια to the present text. In Germany we must first of all refer to Hilgenfeld, who has not only returned to the defence of his old anti-Baur position in an essay entitled "Mark between Matthew and Luke" (*Zeitsch. f. wissenschaftl. Theologie*, 1866, p. 82, foll.), but in some later researches (*ibid.* 1867, p. 303, foll.; 366, foll.; 1868, p. 22, foll.) has described Matthew as a "tertiary" formation, the lowest stratum of which is demonstrably that Aramaic "gospel according to the Hebrews" the fragments of which he about the same time collected (*Novum Testamentum extra canonem receptum*, 1866, p. 14, foll.). This last opinion, however, so often maintained from Semler to Baur, is rejected by all other critics, Sepp excepted. The "gospel according to the Hebrews" is probably only an Aramaic edition of the Greek Matthew, accommodated to the wants of the Jewish Christian sect.

We pass to Holland. In 1863 Lamprechts showed convincingly that Luke was dependent on Mark. Meijboom (*Geschiedenis en Critiek der Marcus-Hypothese*, 1866) and Michelsen (*Het Evangelie van Marcus*, 1867) maintained the originality of Matthew and Mark respectively, the latter, however, carefully distinguishing between a Protomarcus (who alone lived before the fall of Jerusalem) and a Deuteromarcus. Scholten, the real head of the Dutch school, adopted this distinction in *De oudste Evangelie*, 1868, where he made a sketch of the life of Christ by John Mark and the collection of λόγια by Matthew the lowest strata of the evangelic literature. From the λόγια and an enlarged edition of Mark proceeded the existing Matthew, which, however, as in the case of Mark, we only possess in a final church-redaction, so that Scholten, like Hilgenfeld, can speak of a Tritomatthaeus. The controversy does not seem to have worked itself out in Holland any more than in Germany; at least, A. D. Lomans and Hoekstra, in the *Theologisch Tijdschrift*, occupy only middle positions.

"Via Media" has in fact become the watchword of recent synoptic criticism. A whole series of works, the most mature of which is the commentary at the head of this article, are devoted to the object of distributing the features of originality between Matthew and Mark. The first in the field was Gustave d'Eichthal (*Les Evangiles*, vol. i. 1863), who is in the main inclined to Matthew, and discovers in Mark distortions of the traditional accounts. The case of the latter is judged somewhat more favourably by Klostermann (*Das Marcusevangelium*, 1867), who makes out Mark to be not only the *pedissequus Matthaei*, with Augustine, but also the speaking-trumpet of Peter. And similarly Grau in his *History of the Development of the New Testament Literature* (vol. i. 1871), the theory of which is the mutual dependence of Matthew and Mark, resulting in the predominance of the collection of λόγια in the one case, and of the oral communications of Peter in the other. Professor Weiss, too, with whom we are more immediately concerned, has been endeavouring from time to time in the course of the last ten years to establish a middle position. He still maintains the (in our opinion) unnatural and untenable theory that our second gospel is based *at once* on the record left behind by Matthew and on the oral teaching of Peter. The former, *i. e.* the λόγια, combined with our present Mark, seems to have formed the foundation for our present gospel of Matthew.

Two points will at once occur as questionable. First, that on Dr. Weiss' theory the work of Matthew was already known by our second evangelist. And next, that it is supposed to contain not only discourses but narratives from the first appearance of the Baptist to the story of the Passion.

The former view is held by Weiss in common with Ewald and Meyer; the latter, so far as we know, has only been adopted by Wiesinger. Both views, of course, hang together. For since no discourses of any length are reported by Mark, except the Judeo-Christian apocalypse in the thirteenth chapter, the work of Matthew (if Mark made use of it) *must* have contained a narrative element. And so the group of sketches in our present Mark will fall into two series: (1) a larger one containing such as are based on the recollections of Peter, which would naturally be sporadic and unconnected, and may be recognised by their picturateness of details; and (2) a smaller one, comprising those edited after the aphoristic notes of Matthew. It is obvious that in such an accidental combination of elements no reliance can be placed on the plan and sequence of the parts, and if for no other reason the adherents of the strict "Mark-hypothesis" must protest against the partial nature of the support given to them by Weiss. "The peculiarity of Mark's composition is the way in which, through the succession of single pictures and groups of narratives, he brings into relief the pragmatic progress by which, according to his general theory, the public life of Jesus was distinguished." These words of Dr. Weiss almost remind one of Volkmar, who explains the whole of Mark as a Pauline system of dogmatics in a historical form. The only distinction is this, that Volkmar explains the entire contents of the second gospel as a purely imaginative composition, as Baur has done with regard to the fourth, while Dr. Weiss cannot admit the slightest doubt of a delineation based on a twofold apostolic testimony. As a rule he thinks it superfluous to touch at all on this side of the matter. If, on the other hand, the framework, into which Mark succeeds on the whole in bringing the life of Jesus, corresponds not so much to real history as to the "general theory" of Mark, this is not displeasing to a theologian who, like Dr. Weiss, assumes the historical character of the fourth gospel. Others, like ourselves, will regret to see the important results of the "Mark-theory" called so needlessly into question, and that by one who has so little perception of the transitions of style as to regard viii. 27-x. 45 as a connected section relative to the training of the disciples.

Our author's criticism of the well-known hypothesis of Griesbach, according to which our present Mark is an epitome of the first and third gospels, is excellent. That hypothesis is, however, far from being extinct. In particular, the lives of Jesus by Strauss (second edition) and Keim proceed from the same assumptions (not, indeed, maintained at all strictly by the latter), and Zeller (*Vorträge u. Abhandlungen*, 1865, p. 442, foll.; *Zeitsch. f. wissenschaftl. Theologie*, 1865, p. 308, foll.; p. 385, foll.) has attempted both upon general grounds and by special instances to prove that they are still valid.

This school of critics has been answered by Hilgenfeld (1866, p. 91, foll.) and Hanne, and also by Weiss, who observes that Strauss and Keim have only pointed out the extreme consequences of the unfavourable verdict on Mark, but not succeeded in finding any traces of a later age, and still less in making at all distinct the compromising tendency ascribed by the Tübingen school to the supposed epitomator (p. 8). He also makes some short but telling remarks on scholars, who, conscious of their own incapacity to solve the synoptic problem, find it convenient to deny the facts *in toto* as inventions of the modern mania for hypothesis (p. 10). Thus a Roman Catholic, Dr. Friedlieb (*Prolegomena zur bibl. Hermeneutik*, 1868, p. 127, foll.), refers everything to the oral teaching of the apostles (!), and a Protestant theologian, M. Godet, in his *Commentaire sur l'Évangile de saint Luc*, has tried to show in detail that the principle of oral tradition is

on the one hand so sound, and on the other so elastic, as to explain all the difficulties whether of coincidence or divergence in the synoptic gospels.

It may not be out of place to remark that the present writer has found no reason to abandon his own hypothesis, which, in spite of some modifications in details, still appears to him as that which accounts by the simplest means for the largest number of phenomena. As a test of its correctness, applied to the observation of details, the reader may be referred to a paper on the original position of Luke vi. 39, 40, Matt. xv. 14, x. 24, by W. Brückner (*Studien u. Kritiken*, 1869, p. 616, foll.). A successful effort to popularise synoptic researches has been made by E. Zittel in his work, *Die Entstehung der Bibel* (1872, p. 103, foll.), which may also be recommended as a thoroughly readable summary of Biblical investigations in Germany.

The recent revival by Noack of the theory which makes Luke the earliest of the evangelists is curious, and nothing more. The point really at issue is whether Matthew or Mark has the priority, and how nearly unanimous the supporters of the latter have become may be seen from Ewald, who, in his latest work (*Die drei ersten Evangelien und die Apostelgeschichte*, vol. i. 1871), approximates more closely than before to the view of the present writer. He now thinks that the collection of *λόγια* had already been rendered into Greek, when it was employed by the authors of our synoptic gospels. In relation to Mark, his procedure seems to us by far too artificial, that writer's sketch of the life of Jesus having been combined, according to Ewald, with Matthew's collection of *λόγια*. The work thus produced was known, he thinks, to the authors of the first and third gospels in a more complete form than we now possess; the sermon on the mount in particular has dropped out of the text at Mark iii. 19. It follows that the remarks of Dr. Weiss (p. 18) on Ewald's position are inaccurate, although the views of the latter in their present modified form were published as long ago as 1850. As for Dr. Weiss's further remarks against the hypothesis of the present writer, they are met by anticipation in contributions of the latter to Schenkel's *Bibel-Lexicon* (vol. ii. pp. 207, foll.; 217, foll.; 416, foll.; and vol. iv. pp. 67, foll.; 121, foll.; 135, foll.), to which the reader may be referred.

H. HOLTZMANN.

Paul of Tarsus. An Inquiry into the Times and the Gospel of the Apostle of the Gentiles. By a Graduate. Macmillan.

THE style of this work reminds us much of *Ecce Homo*. Indeed the similarity both of style and (we might add somewhat conjecturally) also of standpoint is so great that we might have been led almost to identify the writers. We miss, however, in *Paul of Tarsus* that admirable method and clearness of development which was characteristic of *Ecce Homo*; and the style, along with striking resemblances, is inferior in reserve and self-command.

The book is not, as might be supposed, a life of St. Paul, or a progressive sketch of the course of Christian theology. It presents, so to speak, a horizontal rather than a vertical section of the apostolic age. It depicts the conditions under which St. Paul lived, the sort of ground on which he worked; and it also gives a general outline of his teaching. But it does not trace (except here and there incidentally) the successive development either of his missionary career or of his theology. It is a bird's-eye view of the whole seen at once.

The writer is fond of dealing with things in masses—broadly, and by means of a few prominent instances, rather than with any minuteness of detail.

He cuts the critical knot at once in the preface by accepting all the writings attributed to St. Paul—except, of course, the Epistle to the Hebrews—as genuine (pp. vi, 56, 105, 178). It is the major premiss of the negative criticism that the author contests; he admits the facts observed by the critics, but denies that they prove so much as they are supposed to do. The Acts are sparingly used; and the critical difficulties that arise in connection with them are therefore not discussed.

The broad and general mode of treatment that the author has adopted removes for the most part the occasion for criticism; but in some cases we think that it has led him into mistakes. Thus an impartial review of the evidence compels us to place the establishment of episcopacy considerably earlier than the middle of the third century (p. 144). Too much is made out of a single expression in the famous passage of Justin (*ὁ προετώς*, *Apol.* i. 65—Nablous, by the by, is Sichem, not Samaria, p. 116). His apology was addressed to a heathen, and would naturally avoid technical terms. But our author seems to have forgotten the Epistles of Ignatius.

Then we think he is a little too hard upon celibacy. After all Fra Angelico, Savonarola, and Michel Angelo were celibates; and the relation between their celibacy and their excellence is not altogether accidental. It is true that celibacy has been abused by being made a compulsory institution; true also that St. Paul advocated it for special reasons. But these reasons are such as may recur. "Every man hath his proper gift of God, one after this manner, and another after that."

We agree with the author in the main; but we think that he takes sides a little too much, and does not always do full justice to that to which he is opposed. He cannot dismiss from his mind the controversies of the present in dealing with the past. Anything that is hierarchical, ascetic, or dogmatical, arouses his wrath. On the other hand, he takes a peculiar interest in all the political and secular side of St. Paul's activity; and his sympathies or antipathies are thus continually engaged.

The work is essentially that of a layman, widely if not deeply read, and a master of vivid presentation. For ourselves we should perhaps at times prefer somewhat quieter tones; but that is a matter of taste. The author seems to us to be moving—both in what he rejects and in what he retains—in the right direction: and there can be no doubt that his book will have a stimulating influence, though it does not enter sufficiently into detail to make any marked addition to our knowledge of the life and theology of St. Paul.

W. SANDAY.

Intelligence.

M. Émile Burnouf's *La Science des Religions* (Paris: Maisonneuve) is about to appear in a new and, we may hope, revised edition. The book is not without literary merits, and the introductory chapters contain some intelligent and well-timed remarks. But the author's application of his method is the most perverse which it has been our lot to meet with since the unhappy works, one of which is appealed to as an authority by M. E. Burnouf, of Mr. Ernest de Bunsen. The least unsatisfactory portion is that on the religions of the eastern Aryans, yet there is nothing even here to indicate that accurate knowledge of the sacred writings which we have a right to expect from a Burnouf. "The Zend-Avesta," we are told, "contains explicitly the whole metaphysical doctrine of the Christians." "Almost all the elements of the legend of Christ are found in the Veda." "[The central event of Holy Week] is twofold: it is at once and in an indissoluble manner the resurrection of Christ and the renewal of fire." "At last [in the Office for Holy Saturday] Christ appears under his true name of *Agnus*, which may well be *Agni* under a Latin form. Then they recite the following prayer, where in a few phrases the 'mystique' of the whole paschal rite is expounded: 'O night truly happy, which has despoiled the Egyptians (in the Veda, the Dasyus) and enriched the Hebrews (the Aryas)! &c.' " The re-

ligion of Christ has not come to us from the Semites, but 'the ancient law' contained a portion of Aryan doctrines which Jesus came 'not to destroy, but to fulfil.' " "The mass of the people of Israel were Semitic, and attached themselves to the worshippers of Elohim, personified in Abel. The others, who have always formed the minority . . . were probably Aryas : their principal centre was fixed to the north of Jerusalem in Galilee." "It [Genesis] simply reproduces, under an abridged and diminished form, the Aryan traditions of central Asia." Such gross perversions of facts cannot be allowed to pass without an expression of surprise at the levity of the author and the credulity of the reading public.

A revised edition of Knobel's commentary on Isaiah, by Professor Diestel, requires no commendation. It was manifestly too soon after the last edition to think of entirely recasting the work ; hence the additions are for the most part confined to notices of the views of more recent commentators (Delitzsch, Cheyne, Seinecke), and references to Assyriological researches, which will prove of great value to the student.

We may also call attention to Wellhausen's critical notes on the text of the books of Samuel (slightly crude, but more methodical than Thenius), and to the accurate edition of the Palestinian text of Isaiah, by Baer and Delitzsch.

Contents of the Journals.

Studien und Kritiken, 1872, No. 4.—Schürer on the ἀρχιεπίσκοποι in the N. T. [The term includes all the members of the families from which the high-priests were chosen.]—Grimm on the problem of 1 Peter.—Bender on the question of miracles.—Zyro on Matt. vi. 11, and on James iv. 5.—Sayce on the besieger of Samaria, with Schrader's remarks. [Seems to have been written a good while before publication.]—Kamphausen on *The Speaker's Commentary*. [A more lenient judgment than might have been expected from the editor of Bleek's *Introduction to the Old Testament* ; and one cannot help feeling that it has been slightly influenced by a supposed representative character which attaches to the *Bible Dictionary* in a much higher degree than to *The Speaker's Commentary*. The latter work, in fact, represents but a section of the actual church of England. "Credit is due," according to the writer, "for the diligence with which the church-version has, even in minor points, been tested by the original." . . . "Yet it must be said that much more might have been done if the Anglican scholars had displayed a higher degree of care and tact in linguistic matters." With regard to exegesis, the verdict is still less favourable, for "this [commentary] absolutely repudiates the scientific character, inasmuch as it is almost throughout subservient to the false [kind of] apologetics." Just praise is given to the treatment of geographical and archaeological points ; also to the abstention of the writers from polemical bitterness and homiletical unction. A sense of humour is shown in directing the student's attention to concessions inconsistent with "orthodoxy."]—Engelhardt on Spiess' *Logos Spermaticos*.

Jahrbücher für deutsche Theologie, vol. xvii. No. 2.—Principal Reviews :—Schröring and Märker on passages of Samuel ; English works on Isaiah ; by Diestel.—Meyer and Overbeck on Acts ; by W. Schmidt.—Weiffenbach on James ii. 14–26 ; by Weizsäcker ; and (together with Hulter on James) by W. Schmidt.—Weiss on Mark ; by Wiesinger.—Heinrici on the Valentinian Gnosis and the Holy Scripture ; by Weizsäcker. [Severe.]

Theolog. Literaturblatt (Rom. Cath.), June 4.—Berger and Zürcher on the history of the Constance council ; rev. by Schwab.—Weiss on Basil and the two Gregories ; rev. by Reusch.—June 18.—Reinke's *Beiträge* ; rev. by Reusch.—Schröder's *Sanct Brandan* ; by Birlanger. [An Irish legend transported to Germany by the Scottish monks.]—July 2.—Grau's *History of N. T. Literature* ; by Langen. [Full of original views, but separated from the necessary proofs.]

Monatschrift für Gesch. u. Wiss. des Judenthums, June.—The integrity of chaps. xxvii. and xxviii. in Job ; by Dr. Grätz. [These chapters are inconsistent with the previously expressed sentiments of Job, but very suitable for Zophar. According to the present arrangement, the latter only speaks twice, whereas the other two friends speak thrice. The introductory formula has dropped out of the text.]—July.—The Sources of the Philonian Logos.—The Additions in the LXX. Version of Job ; by P. F. Frankl. [Drawn from an old Aramaic Targum.]—Register of Sins in Ewald's *Hebrew Grammar*. [Professedly "out of respect for the public and regard for the dignity of science ;" but there is room for doubt. The author rates the respect of Christian scholars for Ewald's authority far too highly. And it seems to us both paltry and useless to irritate the feelings of a great scholar, who once led the van of Semitic philology. It would be a consolation to a less generous mind than Ewald's to think how easily any non-Jewish scholar might pull to pieces some of the philological articles in the *Monatschrift*.]

Jüdische Zeitschrift (ed. Geiger), vol. x. Nos. 1 and 2.—The Moral and Date of the Book of Tobit ; by A. Kohut. [A covert polemic against the Zarathustrian prohibition of interments, which was extended to the Jews at the date of the composition of the book (in Persia, probably under Ardesir I.)—Wellhausen on the Books of Samuel. [A very valuable review.]—Kohut's Persian translation of the Pentateuch by Tavus. [Criticism of details.]

New Publications.

BIBLIA SACRA. Codex Vaticanus. Tom. III. (Psalms-Sirach ; ed. Vercellone et Cozza) Rome : Spithoever.

CYRILLUS. In S. Joannis Evangelium. Accedunt in D. Pauli epistles quaedam fragmenta etc. Ed. P. E. Pusey, A.M. Oxford : Clarendon Press.

HOLTZMANN, H. Kritik der Epheser- und Kolosserbriefe. Leipzig : Engelhardt.

JESAIAS. Textum Masoret. accuratissime expressit, e fontibus Masorae varie illustravit etc. S. Baer. Praefatus est Fr. Delitzsch. Leipzig : Tauchnitz.

MAT, A. Nova Bibliotheca Patrum. Tom. VIII. Ed. Cozza. Rome : Spithoever.

PROPHETAE CHALDAICE. P. de Lagarde e fide cod. Reuchlinian ed. Leipzig : Teubner.

SCHOLTON, J. H. Der Apostel Johannes in Kleinasien. Aus dem Holländischen. Berlin : Henschel.

Physical Science, &c.

Le Soleil. Par le P. A. Secchi, S.J. Paris : Gauthier-Villars, 1870. **Spectrum Analysis in its Application to Terrestrial Substances and the Physical Constitution of the Heavenly Bodies.** By Dr. H. Schellen. Translated by Jane and Caroline Lassell, and edited with Notes by William Huggins. Longmans, 1872.

We know of nothing which gives us a higher or more hopeful idea of the possibilities of modern science than the progress which has been made during the last five years in the study of the sun by the new method ; a method the enormous power of which is not yet recognised whether we consider either the work it is capable of doing or the influence which the generalisations which it renders possible must have upon the science of the future.

What has already been accomplished in this time ? Faye's beautiful but unsound theory as to the nature of sun-spots has been entirely swept away, while the idea of Wilson, that sun-spots are cavities, has been absolutely established—a result which it seemed almost hopeless to arrive at by the telescope alone, seeing that even the great Kirchhoff thought himself justified in considering them as clouds. But much more sound and certain knowledge than this as to the nature of sun-spots has been gained : the vapours which affect the spot-level are now in part known ; what happens to spots in the various divisions of the sun-spot period is now more than suspected ; the velocity of the currents of the various vapours in the spot itself, as contradistinguished from that at higher levels, has been determined, while we are rapidly accumulating knowledge which we may hope will soon enable us to state the exact cause of the formation of a spot.

To the outsider, however, most of the interest attaching to the recent work is associated with the prominences—and perhaps with reason, for here the unfolding has been of a really startling character to him. For the first time we have been permitted to enter into the mysteries of an unseen world, where the visible is beggared at every step. The eye and the telescope together tell us of a sun wondrous in its spots and its faculae, and there the record ends ; but now the astronomer, as it were, "feels from world to world," and the spectroscope enables him to detect action as far removed from those ordinarily known to occur in the sun's atmosphere

as the rushing hurricane is from the quiet ripple on some fern-girt pool. But if the new knowledge thus acquired has been of the sensational sort, it has at the same time been of surpassing value, embracing solar chemistry as well as solar physics and meteorology. Not only can we now watch tremendous eruptions from the very bowels of the sun; the descent of the cooler materials; and the effect of mighty rushing winds, but we can divide the solar atmosphere, so to speak, into shells, and name the constituent materials, some of them new elements, of these shells, their simpler nature as we get higher in the sun's atmosphere being due to a thinning out of the various gases and vapours.

From these and other results, to which the space at our disposal does not allow us to allude, we have a thousand new problems to attack in solar physics. The spots have been found to have periods at which they are most and least numerous. Then is not this so with the prominences? Are the materials of the prominences always the same? Do they appear in zones as do the spots?—are types of hundreds of questions which will soon be answered.

But this is not all. This solar work has given a life to terrestrial spectrum analysis that it did not possess before, and discovery in this branch of knowledge has gone on hand-in-hand with the new outcomes regarding the sun. The changes which take place in the spectra of the same substances submitted to different conditions have been studied, and the results of these enquiries have tremendous bearing not only upon the spectrum of the sun, but upon the spectrum of every star that shines. Hence a host of other enquiries. Do the lines in the solar spectrum change as well as the spots on the sun's surface? Is their thickness always the same?—and then, knowing that this varying thickness is due to varying pressure, as the varying brightness is due to varying temperature, we have the further queries, Is the pressure of the hydrogen or the magnesium vapour visible outside the sun always the same?—and, finally, Is the sun always of the same size?

These results, and these enquiries directly founded upon them, are on such a stupendous scale that the interest connected with them has broken bounds, and we find the general public as anxious to be informed as to these matters as scientific men themselves: hence a demand for popular expositions not only of the recent discoveries, but of the processes on which the new work is based and of the associated facts.

The two books at the head of this article are among the attempts which have been made to supply this want: one of them is by Father Secchi, the Director of the Observatory of the Roman College; the other by Dr. Schellen, Director of the Realschule at Cologne. The books are, moreover, to a certain extent complementary to each other, as in the one we find the new work discussed in relation to the sun, while in the other spectrum analysis—the method of the work—is the author's keynote.

Let us deal with Father Secchi's book first. In the first part, that dealing with the structure of the sun, we are introduced to the general aspect of the sun, and here, in the first hundred pages, we have certainly the most valuable part of the volume, for Father Secchi has a fine telescope, and observes in a locality where at times the air is peculiarly pure; and as the various detailed descriptions are accompanied by drawings, many of them never before published, an exceedingly good idea may be gathered by the general reader of this class of observations, more especially as here and there very practical descriptions of the method of work are given. We may especially refer to pp. 66–80, in which the *voiles roses*, now and then seen in spots by means of the polarizing eyepiece in which no coloured glasses are employed, are referred

to. The history of the spot of 23rd January, 1866, will be read with the greatest interest.

It is to be regretted that the author has not preferred to postpone his general conclusions until the reader is in a position to bring all the now available knowledge to bear upon the enquiry, and that the conclusions are so scattered, and at the same time so contradictory, that Father Secchi may claim to have promulgated any of the ideas on sun-spots which may hereafter come to be established. At p. 64 we have two hypotheses given as to the formation of sun-spots, one the up-rush theory, the other the cyclone one. On this we read: "Nous pouvons regarder la première opinion comme plus probable; le mode de formation des taches semble bien indiquer une éruption de l'intérieur vers l'extérieur;" elsewhere we find the cyclone preferred. This, however, is a detail compared to Father Secchi's explanation of the dark appearance of sun-spots which he appears to have settled entirely to his own satisfaction. Before we refer to this, however, we must say one word by way of introduction touching the hypothesis of Faye, to which we have before referred. Faye imagined a gaseous nucleus of intensely heated but feebly *radiating* gas. Balfour Stewart objected to this that a gas, if it were a feeble radiator, would be a feeble absorber, and that therefore we should see the photosphere on the other side of the sun through this gas. Father Secchi, who does not seem to see the reasoning on which this objection is based, writes: "On a objecté que le soleil ne saurait être gazeux sans être transparent," and then refers to the *absorption* in our own and the solar atmosphere to prove the contrary. Here, again, Father Secchi must take his choice. If the sun's interior is hotter than the exterior, as he affirms elsewhere, these objections are those of one ignorant of the matter.

The other portions of the work are chiefly remarkable for the skilful manner in which the author gives the idea that in all the recent progress he alone has borne the heat and burden of the day. Father Secchi has an idea of solar planetary tides; he therefore states that the Kew pictures have not yet been reduced: he refers to the work which has established that sun-spots are regions of greater relative absorption. Here he states his conclusions have been *endorsed* by an observer who published the discovery some time before Secchi had repeated the observation. Father Secchi has not yet apparently observed with sufficient optical means to enable him to detect the alterations of wave-length due to the motion of the various gases and vapours (although he has stated that he has noticed an alteration of wave-length which he could only have seen had the sun's rotation been some hundred times more rapid than we know it to be!); hence, in a line, he discards all reference to the precious knowledge that has been acquired by this method of research. In the account of the use of the pile we find no mention of Henry, while the types of stars are not referred to Rutherford, as they should have been, and so on. Surely there should be nothing more disastrous for the reputation of a scientific man than such unfair dealing as this. It might be passed over with small notice in the production of a literary hack, who writes to sell, and who spices his productions with personalities in order that they may sell the better; but Father Secchi is not a literary hack, and he is not compelled to write books, and, when he does, he should add to his reputation for scientific research which has covered a wide field by placing it before the world with a higher regard for justice than that he has shown in too many instances, especially in regard to English work.

In Dr. Schellen we have an author much less practically acquainted with the researches on which he treats than Father Secchi, and to this must be attributed not only a

want of arrangement here and there, where we find the same work taken up over and over again, and the point of some of the recent observations and experiments missed—whence comes a curious rating of their importance—but also now and then an apparent unfairness, which will strike the reader conversant with the subject, but which, we believe, is unintentional.

We have first a description of the artificial sources of light and heat, followed by an account of the properties of light and of its analogies with sound, refraction, of course, holding a high place. We then get several chapters describing the various simple and compound spectrosopes in use, and the methods of showing and observing the various phenomena are stated. In the third part of the volume, the application of spectrum analysis to the study of the various celestial bodies is stated at great length. Here the illustrations are of the highest order, and the reproductions of the various standard maps of the solar spectrum are simply perfect, while full reference is made to the memoirs both of Kirchhoff and Ångström, as well as to all the recent memoirs touching both sun, stars, comets, nebulae, and so on, the recent eclipse observations being also discussed.

This must suffice us as a general description of the plan of the work.

In fact, the attempt made by Schellen is on the whole admirable in design and perfect in tone; and had the English translators, the Misses Lassell—who have done their part of the work in a most creditable manner—been fortunate enough to have found an editor competent to set themselves and the author right where a detailed knowledge of the subject was required, and with the same desire to do justice as the author himself has shown, the book might have been made as perfect as to the text as it is in its general scope, and its illustrations. Instead, however, of “crowning the edifice,” and supplying defects, the editor has chosen to mar its symmetry with glaring blotches in the worst possible style.

Thus, in the elementary portion of the subject, we are treated to the terms “refractory index,” p. 386; “position of minimum of (*sic*) deviation,” p. 78; and we are told, p. 89, that “the dispersion of light is therefore to be clearly distinguished from refraction,” the term deviation not being introduced. On p. 90 we have the general statement that “if the whole length of the solar spectrum be divided into 100 equal parts, the proportions of the colours will be as follows—red 12, orange 7, yellow 13, green 17, blue 17, indigo 11, and violet 23,” without a word of reference as to the material of the prism, or to the irrationality of the spectrum. At p. 101, where continuous and discontinuous spectra are introduced, we find no word of the important discovery made by Frankland, that at high pressures the spectra of gases and vapours are as continuous as those of solids or liquids. On p. 115 we find the differential action utilised in direct-vision spectrosopes lucidly described as due to the “remaining rays” after the “dispersive power of the flint-glass” has been “partially destroyed” by the crown-glass. On p. 48 the separation of the poles of the electric lamp is thus described: “The separation is accomplished by the racks *c* and *l*, which before moved forwards, being made to go backwards by means of two connected cog-wheels, which can back them in either direction, a contrivance which helps to make the electric lamp one of the most complicated,” &c. On p. 431, “motion-forms” of prominences, that is, the apparent forms seen with a fine slit, and due to alterations of wave length merely, are given as the actual forms of prominences! But after all, these are small matters, which are referred to as showing that the ordinary duties of an editor have to a large extent been

neglected. What then has the editor done to the book? He has “enriched” it with notes against many of which, I believe, every true man of science who takes up the work will loudly protest. Having in an evil moment promised to review the book, I am bound to keep my promise, but the task of reading through these notes I confess has been one from which anyone having any belief in the ennobling influence of scientific work might well shrink. Let me quote one:—

“In Mr. Lockyer’s communication to the Royal Society in October, 1866, there was no statement of a method of observation or of the principles on which the spectroscope might reveal the red flames. His suggestion consisted only of the following question: ‘May not the spectroscope afford us evidence of the existence of the red flames which total eclipses have revealed to us in the sun’s atmosphere, although they escape all other methods of observation at other times?’”—P. 417.

This requires no comment, except that it is noteworthy that this craving to deprive others of credit should be so closely associated with such a lack of skill; for it is confessed, p. 378, that, “when the position of the lines was known, Huggins saw them instantly with the same spectroscope (two prisms of 60°) which he had previously used in vain.”

The author’s account of the methods of viewing the prominences has given the editor an opportunity of treating the book in his peculiar manner. Let us take Sir John Herschel’s description of the two methods.* We have first the reference to Mr. Huggins’ arrangement, which consisted in “widening the slit sufficiently to admit of the whole prominence being included in its field, and absorbing the light of other refrangibilities so admitted by a ruby glass;” by these means “he was enabled distinctly to perceive *at once* the form of the prominence.” We then read, “Almost immediately after, Mr. Lockyer succeeded, by merely widening the slit of his spectroscope, *without the use of any absorptive media*, in obtaining a clear view of the forms in question.”

In the opinion of Sir John Herschel, then, there certainly was a difference between the two methods, and yet the editor charges the author with inaccuracy when he refers to this difference.

But this is not all. In Mr. Huggins’ communication to the Royal Society we read:† “A spectroscope was used; a narrow slit was inserted *after the train of prisms, before the object-glass of the little telescope*. This slit *limited the light entering the telescope* to that of the refrangibility of the part of the spectrum immediately about the bright line coincident with C.” Observe the reiteration, “*after the train of prisms,*” “*before the object-glass of the little telescope,*” limiting “the light entering the telescope.” Although the veriest tyro will recognise the absurdity of this position of the slit to serve the purpose stated, the position is referred to no less than three times. The editor now rewards the generosity of those who have hitherto refrained from pointing out this monstrous blunder by asserting, in a foot-note to the book under notice, as a correction to his communication to the Royal Society, that “the slit was placed in the focus of the small telescope, and not before the object-glass” (p. 423). The value to be placed on such a statement as this, in such a connection, we will leave the reader to determine.

Enough, however, of these parasitic growths, which, we trust, will disappear in a second edition, in the interests of author, translators, and publisher, all of whom deserve the thanks of all true friends of science for the production of this magnificent volume, which in its present dress, it must

* Herschel’s *Outlines of Astronomy*, 11th edition, p. 723.

† Proc. R. S. vol. xvii. p. 302.

again be pointed out, is due to the efforts of two accomplished English ladies. May we hail this as a sign of the times!

J. N. LOCKYER.

Notes and Intelligence.

The *Quarterly* has a carefully reasoned and, on the whole, penetrating article on Mr. J. S. Mill: somewhat too fragmentary and *découssi*, being rather an aggregate of criticisms on special points in his works than a real criticism of his philosophy. The reviewer seems to want the faculty of synthesis, the absence of which he signalises as a defect in Mr. Mill—a charge which is partly just, and partly mistakes for want of comprehensiveness in view and effort a cautious determination to state only definite results. The writer considers Mr. Mill's strength to be shown neither in the region of practice nor in that of the most abstract speculation, but in dealing with “the broad conceptions which are neither traced back to the fountain-head nor forward to the final issue, but which are based on reality and therefore strong.” This estimate seems judicious, and so do most of the detailed criticisms, with the exception of an attack on the familiar economic proposition that the effective demand for labour is that of the capitalist and not of the consumer: here the critic's objections seem perverse and superficial, and his style unwarrantably supercilious and violent. But most of the metaphysical and logical points are well taken: as (1) that Mr. Mill follows at once the mentalistic and materialistic lines of phenomenism without really reconciling them; (2) that he has qualified his nominalism till it has become conceptualism without his being aware of it; (3) that in attempting to distinguish “cause” from “actually constant antecedent” he has to introduce the notion “unconditional,” while yet holding that not even the law of causation can be unconditionally affirmed. However, in his remarks on this latter point, the reviewer makes it evident that (though the article is entitled, “Mr. J. S. Mill and his School”) he has not read Bain's *Logic*, where the causal nexus is referred to persistence of force. This extension of his reading might have modified his surely unfounded charge against this school as “ad dictos jurare in verba magistri.” Every writer of Mr. Mill's influence has a crowd of followers of this sort: but no one has done more to foster independence of thought in the really serious thinkers who received their first impulse from him. The reviewer must have been thinking of philosophers of the dinner-table or the daily press.

Geography.

A New Caravan Route from Wadai to Egypt.—Writing from Alexandria to the president of the Italian Geographical Society, M. Jules Poncet says: “A perfectly new route through the Sahara to Egypt has been opened. About forty-five days ago (from July of last year) a great caravan of 2000 camels, with 400 cwt. of ivory, several cwt. of ostrich feathers, tamarinds, and from 700 to 800 slaves (the number remaining of 3000 who started with the caravan), came from Wadai to Egypt, reaching the Nile two or three hours' distance below the pyramids of Gizeh, without having touched upon the route from Sioot to Darfur. This is a new source of wealth for Egypt, and of misfortune for the victims of slavery.” Commenting on this in the *Mittheilungen*, Dr. Petermann remarks that as yet there is not one direct route known from Wadai to Egypt. Fresnel, indeed, notices that from Kebabo, the chief point in the oasis of Kufarah, lying on the trade route from Wadai to Bengazi, an old route passes to the eastward, which probably led to the Egyptian oasis of Dakhel, while some degrees southward traces of an ancient way to Egypt, branching eastward from the former, are said to have been found. Has one or other of these abandoned routes again been brought into use, or has this great caravan chosen a new course? We would strongly urge upon Europeans living in Egypt the importance of examining this question; by this means they, like Fresnel, could render important service to the geography of the unknown eastern Sahara.

The Topography of Europe.—Since the year 1856, Herr Emil von Sydow has annually published in the *Mittheilungen* careful reports on the standpoints of European chartography, which by their great critical value have had an influence on both government and private undertakings. In his last report, which appears in the current number of the journal, von Sydow, in dealing with the Austrian government maps, draws attention to the great importance of the adoption of a scale uniform with that which has been found most suitable in other parts of Europe. It has been proposed in Austria to reduce the original manuscript surveys of the country, which are on a scale of $\frac{1}{5000}$ of nature, to that of $\frac{1}{5000}$ (a little less than 1 inch to 1 English mile) for the permanent topographical map of the country. Herr von Sydow is of opinion that a reduction to $\frac{1}{10000}$ would be in every way more suitable: firstly, because this scale would amply suffice to clearly show by far the greater part of the natural or cultivated features of the Austro-Hungarian

Empire; and, secondly, because in those parts which are very minutely and artificially divided, the scale of $\frac{1}{5000}$ would not be sufficiently large, and a change to $\frac{1}{10000}$ for these districts would be desirable. He arrives at this view after many years' use of maps of France, Belgium, Rhenish Provinces, and Westphalia, which are drawn on the closely neighbouring scale of $\frac{1}{5000}$. Prussia is on the point of altering the scale of its map of the western parts of the monarchy from $\frac{1}{5000}$ to $\frac{1}{10000}$, and this change will render the entire map of northern Germany uniform. Saxony has fixed the scale of its new survey map at $\frac{1}{10000}$; the Dufour map of Switzerland is also on this scale; and the countries of South Germany which lie between them must soon adopt it; Sweden and Norway in the north, and Italy southward, have chosen the $\frac{1}{10000}$ scale, and yet between these it is proposed to have a map of the whole Austrian Empire on one slightly larger. This scheme cannot but be strongly deprecated, as it is directly opposed to all ideas of international unity; should it be carried out, and the map be prepared on the $\frac{1}{5000}$ scale, a change to that which has been more generally adopted could only be looked for after a long lapse of years. Perhaps a reduction to $\frac{1}{10000}$ may yet be determined on; we suggest it in the interests of many.

Physiology.

The First Stages in the Development of the Ova of the Common Trout.—Dr. Klein gives a good description of the first stages in the development of the trout (*Salmo fario*) in the fifth number of the *Monthly Microscopical Journal*. He states that up to the sixth hour the fertilised ovum presents a nearly uniform aspect under the microscope. It appears as a dull globe enveloped in a thick vitelline membrane, with irregularly distributed fat-globules. The earliest time he was able to perceive an indication of the blastoderm was after five hours and forty-five minutes, when it appeared as a small, more opaque, irregularly outlined spot, around which the fat-globules are accumulated; at the tenth hour the blastoderm is elevated into a little mound lying in a saucer-like depression of the yolk, and soon after it exhibits slow amoeboid movements. A median furrow then appears, which, some hours later, is crossed by one at right angles, these two furrows being visible at the end of the first day. At the end of the second day the surface of the blastoderm is so divided by furrows as to exhibit eight knobs, but after this the arrangement of the knobs or of the intervening furrows is irregular. Segmentation of the blastoderm into a mulberry-like mass is completed in nine days at the shortest. As regards the expansion of the blastoderm on the saucer-like depression of the yolk, and the large elements which are to be found on the bottom of the segmentation cavity, Dr. Klein compares the growth of the blastoderm round the yolk globe to a cap, the peripheral part of which is thickened, and in regard to the foundation of the embryo at the peripheral thickening, he has but little to add to the account given by Stricker in Max Schultze's *Archiv*, vol. v. Dr. Klein considers the large elements at the base of the segmentation cavity to be products of the blastoderm; that is, they are left behind upon the saucer-like depression of the yolk, as the blastoderm is lifted from the yolk. The first trace of the embryo is a knob-shaped prominence, which slopes towards the centre at one spot of the peripheral thickening at about the fifteenth or sixteenth day after fecundation. On the following day this prominence projects still farther inward, and the internal, or what afterwards becomes the cephalic, extremity stretches like a cord towards the centre of the germinal area. The first indication of a dorsal groove appears at the cephalic extremity of the embryonal elevation; and from the sides of the latter, where the groove is deepest, two cords run forwards to the centre of the germinal area, and meet over the cephalic extremity of the embryo to form what may be called the “secondary elevation.” On the twentieth day the blastoderm has grown round the yolk so far that a portion of the yolk no larger than a pin's head is exposed; on the following day the blastoderm has grown completely round the yolk. The presence of an opening, which subsequently becomes the anus, as Stricker and Rusconi describe, cannot therefore be admitted.

The Amount of Caffein contained in Coffee, and its Action on the Body.—Dr. Hermann Aubert contributes a long paper on this subject to the last part (xii.) of *Pflüger's Archiv für Physiologie* for 1872. He observes that though the amount of caffein in the berry is well known, no researches have been made upon the actual quantity consumed in a cup of ordinary drinking coffee, and although the usual modes of preparation seem well adapted to exhaust the berry of all its useful constituents, there still remains various open questions whether it should be lightly or strongly roasted, whether one or more supplies of boiling water are required, and whether prolonged boiling is of any value. The same questions are unanswered in the case of tea. Opinions also vary in regard to the action of coffee: Johannsen denies the tetanising influence of coffee on muscle generally; Leven maintains that it excites and then paralyses the heart; whilst Falk and Stuhlmann admit only a remarkable retardation of the cardiac-beats as its effect. The author gives the following table to show the amount of caffein contained in raw coffee:—

		Per cent.
Graham, Stenhouse, and Campbell	Native Ceylon coffee	0·87
	Plantation	0·54—0·83
	Martinique	0·36
	Alexandria	0·24
	Java	0·25
	Mocha	0·21
	Cayenne	0·20
	Domingo	0·17
	Mocha	0·6
Döbereiner		0·5—0·729
Versmann		0·4
Puccetti		
Aubert (with chloroform)	Yellow Java	0·709—0·849

Aubert then describes his experiments in detail, which show: (1) That in our ordinary mode of infusion four-fifths of the caffein is dissolved in the filtrate, scarcely one-fifth remaining in the grounds. (2) But little caffein is lost when the bean is roasted till it is perfectly black, and the amount of extractive matter taken up by boiling water is almost the same whether the bean is slightly or strongly roasted. He thinks Frerich's estimate that a cup of coffee infusion obtained from one ounce of coffee contains from four to five grains of caffein rather too high, and is wholly unable to explain Leven's extraordinary statement that every one consumes 1·7 grammes of caffein daily. As regards the physiological action of caffein, its most remarkable effects are the production of increased excitability of the spinal cord and tetanus. This last is produced in frogs by the subcutaneous injection of 0·005 of a gramme, in rabbits by 0·120 of a gramme, and in cats and dogs by 0·200 of a gramme, in the last three cases the solution being introduced into the jugular vein. Aubert was unable to obtain any evidence of increased excitability in the nerves or in the muscles; but the muscles, apart from the tetanus, become somewhat stiff. The tetanus is only of a transitory nature, and, if artificial respiration be maintained, soon disappears. The action of caffein on the heart he finds somewhat complex. Its immediate effect is acceleration accompanied by diminution of the blood-pressure (showing in a striking manner the independency of these two conditions), due, he believes, to a more or less intense paralysis of the ganglionic nerves of the heart. Lastly, he doubts much that coffee owes its popularity to the caffein it contains, but attributes this rather to its enlivening action.

Botany.

Modifications in the Habits of Plants through the Prolonged Influence of Climate.—M. Alphonse De Candolle contributes to the *Archives des Sciences physiques et naturelles*, No. 174 (June 15), a record of some interesting experiments on the extent to which the habits of plants are modified by the climate of the locality where they are grown, a subject of considerable importance in connection with the question of acclimatisation. He obtained seeds of three species of European distribution, *Sisymbrium officinale*, *Senecio vulgaris*, and *Trifolium repens*, from widely separated localities—Moscow, Edinburgh, Palermo, and Montpellier—and sowed them, at the same time and under similar conditions, at Geneva, attention being specially directed to any differences they might exhibit during the period between sowing and germination and between germination and maturity. The general results arrived at were that the seeds originally from higher latitudes were somewhat quicker in germinating, and also somewhat quicker in arriving at maturity, than those from warmer countries; and this difference was developed to a greater extent in the second generation. M. De Candolle does not, however, consider the experiments to have been on a sufficiently extensive scale for much reliance to be placed on his results.

Absorption of Water by the Leaves of Plants.—Prof. Asa Gray, in a recent number of *Silliman's Journal of Science and Arts* (June), finds, as the result of the most recent investigations on this much controverted subject, that although, under normal conditions, plants absorb water only through the root and stem, yet when, owing to injury or any other cause, the stem is unable to perform this function, the leaves then acquire the power of absorbing it in the liquid, but apparently not in the gaseous form.

The present year has been rich in the commencement of several new journals devoted to botanical science. With January was started a fortnightly French magazine, under the title of *Journal de Botanique pure et appliquée*, edited by M. G. Huberson, to contain original articles, translations, and extracts, with abstracts of the botanical communications to the *Académie des Sciences*. The first part of a new periodical, entitled *The Transactions of the St. Petersburg Imperial Botanic Garden*, is dated 1871, but has only recently reached this country. The *Yorkshire Naturalists' Recorder*, published under the auspices of the West Riding Consolidated Naturalists' Society, the first number of which appeared on July 1, is devoted to natural history in all its branches. Still more recently the first number has been issued of a small monthly periodical, entitled *Grevillea*, a medium of intercommunication of students in all branches of cryptogamic botany, edited by the well-known cryptogamist, Mr. M. C. Cooke. The *Journal of Botany*, edited, since the death of Dr. Seemann, by Dr. Trimen, of the British

Museum, has, since the commencement of the year, adopted the very useful practice of giving the titles of all articles on botanical science published during the preceding month, in all journals, both English and foreign.

New Publications.

- BECQUEREL, M. Mémoire sur l'Origine céleste de l'Électricité atmosphérique.
- DUBY, J. E. Choix de Cryptogames exotiques nouvelles ou peu connues. Genf: Menz.
- GEINITZ, H. B. Das Elbthalgebirge in Sachsen. I. Abtheilung. Cassel: Fischer.
- HAUN, J., HOCHSTETTER, F. v., and POKORNY, A. Allgemeine Erdkunde. Prag: Tempsky.
- RODA, G., and MERCELLINO. Manuale del Giardiniere fioricoltore. Torino: L'Unione tipogr.-editrice Torinese.
- RÖDINGER, M. Atlas d. peripherischen Nervensystems des menschlichen Körpers. Stuttgart: Cotta.
- SCHLÜTER, C. Cephalopoden der oberen deutschen Kreide. Cassel: Fischer.
- VOGEL, H. C. Beobachtungen, angestellt auf der Sternwarte des Kammerherrn v. Bülow zu Rothkampf. Leipzig: Engelmann.

History.

The Foundation of French Predominance in Europe. [Heinrich IV. und Philip III. Die Begründung des französischen Übergewichts in Europa, 1598–1610. Von Dr. Martin Philippson. I. Theil.] Berlin: Franz Duncker, 1870.

This book could scarcely have appeared more opportunely. At a time like the present, when the European predominance of France has received so severe a shock, it will be of peculiar interest to observe the beginning of that development of which we are now witnessing the end.

The problem which Dr. Philippson has undertaken to solve had not as yet been considered in its full detail. The main outline was sketched in Ranke's *French History* in his usual masterly style, but the plan of his work did not allow him to go much into particulars. In 1857 Poirson's great work on *The Reign of Henri IV.* appeared, a model of accurate research and application, fully worthy of the "prize Gobert" which the French Academy twice awarded it. As to the inner development of France the book is invaluable and quite exhaustive; hardly any printed materials have escaped the author's notice. But owing to the sparing use made of documentary sources of information, he has not communicated much that is important as to foreign affairs. Philippson's book fills up this gap in a very convenient manner. On the one side, he has had a special eye to the political developments of the time; on the other, he was enabled to follow out the details of the history, and bring to light many new and interesting events and points of view. For the main importance of the book depends on the thorough and comprehensive researches made among the archives and libraries of Berlin, Brussels, and Paris, at which last place the Spanish documents from Simancas on this subject are preserved.

The author begins with the year 1598. Till that time the religious wars had distracted France at home, and crippled her influence abroad. Only when the peace of Vervins (May 2, 1598) had put an end to the civil wars, could the power of the state collect and develop itself. Here, therefore, the opportunity naturally offered itself for giving in the first chapter a comparative view of the condition of the chief European powers, especially of France and Spain. It soon becomes clear how the balance will incline between them at last, though not at the immediate moment. Spain, however great she may outwardly appear to be, has the germs of decay within her. Already the narrow-minded rule of

Philip II., despotic in political as well as in religious matters, had begun the change; under his successor, Philip III. (or rather under the incapable administration of his all-powerful favourite, the Duke of Lerma), it became still more visible. Exhausting wars, the colonization of foreign countries, the expulsion of the Moriscoes, had even, under Philip II., reduced the population of Spain herself from 10,000,000 to 8,000,000. And how completely had every movement of life been checked in them! The liberties of the estates had been destroyed, all free utterance persecuted by the Inquisition, while the system of finance and taxation was the most irrational that can be imagined. The clergy held a fifth of the landed property; the Archbishop of Toledo had an income of 300,000 crowns (840,000 thalers), equivalent to at least three times as much at the present value of money. The high customs duties kept the provinces quite apart from each other; the export of coin was forbidden, commerce crippled by regulations that defeated their own object, especially by the "Alcavala," that is, the exaction of a tenth of all goods sold or exchanged. The home commerce would have been annihilated but for smuggling and fraud. Such statements, which we have no space to go further into, enable us to conceive how, notwithstanding the receipts from the colonies, the prosperity of the nation was always falling lower and lower, while the financial distress of the government continued to increase. Only the army, and especially the Spanish infantry, still kept up somewhat of the fame of the man who had created it, the great Gonsalvo (erroneously called Gaspar in p. 39) of Cordova.

In France, on the contrary, with much less influence abroad, we can see all the germs of a fresh and prosperous development. In 1598, the revenue of 9,000,000 crowns (19,000,000 thalers) just balanced the expenditure, and was capable of considerable expansion. Absolutism was still kept in check by the provincial estates, the municipal liberties, the (judicial) parliaments, above all by the separation of the religious confessions. In France, as in Germany, neither of the two parties had succumbed to the other. The Reformed party had put their leader on the throne—not however till he had (at least outwardly) conformed to the creed of the opposite side. Yet by inclination as well as through necessity he always paid every possible consideration to his oldest and truest friends, and the Reformed were protected by widely extended privileges against the enmity of their foes, and any oppression by the royal officials. Besides such elements of resistance, the long wars had made rest a necessity, and created in the great majority of the nation a readiness to join the side of a prince who maintained order and security. All might be attained when a firm and skilful hand knew how to unite and employ the existing resources.

This was shown at once in the contest for the marquisate of Saluzzo, which our author has described in his second chapter with complete—almost too complete—detail. By the treaty of Vervins this little district was to have come to France. But the ambition of Charles Emanuel, Duke of Savoy, aimed at attaching it to his own house by all the devices of policy, and with the assistance of Spain—really against his own interest, which would have required him to obtain support in Italy against his mighty ally by means of France. The duke was able for a long time to protract the matter, by negotiations, and then by a visit to Paris. At last the king's patience was worn out, and on August 11, 1600, he declared war, the issue of which was rapid and decisive. Deprived of nearly half his dominions, and deserted by Spain, the duke had, on January 17, 1601, to submit to terms of peace. France, it is true, gave up the distant and isolated marquisate, but she received instead important possessions

of Savoy west of the Alps, the county of Bresse with 200,000 inhabitants instead of 25,000. The relations with Spain also became peaceful about the same time. Henri had already, in April 1600, sent Count Rochebot as ambassador to Madrid, and after the peace of Lyons the Spanish king, on May 27, 1601, brought himself to take the formal oath of peace. When a little later, in September 1601, the same week gave the Spanish king a daughter and the French king a son, Henri began to plan a marriage between them, which he hoped would give his son the Spanish Netherlands as his bride's dower. The interesting negotiations on this point in the autumn of 1601 are published by Dr. Philippson for the first time from the despatches of the Spanish ambassador Tassis among the Simancas papers. Perrens' well-known work, *Les Mariages espagnols sous le Règne de Henri IV*, thus receives a considerable supplement.

It was almost more difficult to maintain peace at home than abroad. What a hostile position the confessions still held towards each other! There were some men, endowed with a freer insight, who recommended toleration, freedom of conscience, and equalisation of rights between the two confessions. Henri's trusted minister, Sully, inclined to these views, and his co-religionists reproached him bitterly with addressing the pope as "Holy Father." The king, too, was indifferent as regards dogmatic distinctions, whether it was that he really had attained a clearer insight into the essential nature of religion, or that he was without the religious sense itself. In either case his manner of thinking was extremely advantageous to France. But what difficulties he encountered in carrying out his views among the Catholics, and no less among those who held his earlier faith! The Reformed, in fact, formed a state within the state. Only after long negotiations did they bring themselves to allow their governing body to be, to a certain extent, dependent on the king. These negotiations had been going on since 1596; at last the leaders of the Huguenots gave way, and Henri signed, April 15, 1598, at Nantes, the famous Edict.

Besides the religious opposition, there was also an aristocratic one—not dangerous through its own power, but only when leaning on foreign help. Already, during the war of Saluzzo, Savoy and Spain placed their main trust in Marshal Biron, who, after having been one of Henri's most zealous and useful servants, and holding the highest places of honour, dazzled by success, had been led on by a boundless ambition to make himself a tool of his sovereign's foes. While at the head of a French army in January 1601, he had concluded an agreement which even the Constable of Bourbon would have hardly brought himself to agree to. Marseilles was to belong to Spain, the French provinces were to be separated from each other as independent districts, except that they (like the German princes) might choose an "over-lord." As his reward Biron was to have a relation of the Spanish king as his wife, with a rich dowry, and the duchy of Burgundy as hereditary in his family. However wild these plans sound, yet this danger lay in them for Henri, that Biron succeeded in uniting himself with all the other elements of opposition. Discontented Catholics who could not forgive the king the Edict of Nantes, the Reformed whom his conversion had displeased, great nobles who could not forget their previous state of independence, and besides these a great personal following, attached themselves to Biron. In addition to this, a new tax had caused great discontents and even disturbances in some of the southern provinces. Of all these circumstances the restless, ambitious viceroy of Milan, the Duke of Fuentes, hoped to avail himself, to strike a great blow against France, which would compensate Spain for her ill-success against England and Algiers.

Henri himself was not free from anxiety. He tried to win back Biron by entrusting him with the government of Guienne, and with important embassies to Switzerland and England. In London (according to De Thou, Sully, and other contemporary writers), Queen Elizabeth showed the former favourite of the French king from a window of the Tower the head of her own former favourite, Essex, whom she had beheaded just before. "If the king, my brother" (she added), "followed my advice, the heads of the factious and rebellious should soon be placed on the gates of Paris as a terrible warning, just as now on those of London." This story about the head of Essex does not seem to me so trustworthy as it does to the author. Camden, in his *Annals of Queen Elizabeth* (Leyden, 1649, iv. 822), says expressly that Essex' head was buried with his body; he confirms, however, the account of the words which Elizabeth made use of to Biron. In any case the marshal neglected this last warning also, and Henri was forced to take extreme measures. Now, however, it became clear how the monarchy had gained in power. The king had only to appear, and the contumacious provinces became obedient. The great men tried to escape by flight or submission. Biron, deserted by his followers, betrayed by his confidants, dared not refuse to obey the king's summons to the court. He reached Fontainebleau June 12, two days afterwards he was apprehended, and on July 31, 1602, executed in the court of the Bastille.

Dr. Philippson has traced all the threads of this remarkable conspiracy, and been able, with the help of MS. materials, to bring much that is new to light. A special excursus at the end of the work gives a full account of the sources of information. He judges the marshal—I think rightly—with more severity than Ranke has done, and brings out clearly the absurd, immoral character of Biron's scheme. Henri has been much blamed for letting the sentence against Biron be executed. We may doubt, indeed, whether greater tenderness towards one who had been such a zealous and deserving follower would not have done honour to his character, but his severity proved highly beneficial to his government. After Biron's fall opposition ceased; for the first time Henri found himself in full and undisturbed possession of his dignity and power.

The fourth and last chapter of this volume begins therefore most appropriately with well executed characters of the king and his leading ministers. As the chief among them appears Maximilian de Bethune, Marquis de Rosny, better known under his later title as Duke of Sully. In his lifetime much hated and reviled, he has been compensated for this since his death, in our author's judgment, more than is his due. He provided carefully for his own fame by his well-known book, the *Oeconomie royale*, which down to the present time (by Poirson, Lacombe, and others) has been used as a trustworthy authority of the highest value. But Dr. Philippson shows by many examples (pp. 235, 325, 363) how often his self-love has led the duke into inaccuracies and even into manifest falsifications, and how untrustworthy in general his assertions are. A Munich scholar, Dr. Ritter, has lately shown (*Abhandl. der bayrischen Academie der Wissenschaften*, III. Classe, XI. Band, III. Abtheilung) in a special treatise that even the so-called "great plan" ascribed to Henri, viz. the formation of a European commonwealth of states, must be regarded as an invention of Sully's own.

The rest of the chapter is devoted to the political development of our part of the world in the three following years, and especially to the relations between France and Spain. The author has, not unfairly, given it the title of "the hollow peace." Both states still shrunk from an open declaration of war. Henri thought the time not yet favourable; he

therefore rejected Elizabeth's repeated proposals for an alliance against Spain, and resumed in November 1602 the old plans for the marriage; the Spaniards tried a little later, through the intermediation of the pope, to establish friendly relations with him. But secretly both continued to work against each other, without being by any means particular in the choice of means. Even during the peace Henry did not hesitate to favour plans for a sudden attack on the fortress of Pampeluna, and when the monks had convinced the pious king of Spain that he might (in the interest of religion and his crown) unite himself, contrary to his oath, with rebellious Huguenots against Henri, even the "Most Christian" king did not hesitate, in order to injure the house of Habsburg, to stir up the Turks, whether against Hungary or against Spain. For years he was even connected with Philip's Mahomedan subjects, the Moriscoes, who, driven to despair by intolerable oppression, gladly took the opportunity to unite themselves with the enemy of Spain for vengeance and revolt. On this Dr. Philippson communicates new information of great interest, taken from the memoranda of the governor of Bearn, the Duke of La Force. The insurrection which was to have begun with the burning of Valencia was just ready to break out when the Spaniards, warned in time by their spies, quenched it in the blood of its leaders. Bribery and espionage were then the most favourite means of political skill. The Spaniards had even succeeded in gaining over the trusted secretary of the French minister of foreign affairs, the Marquis of Villeroi. This man, Nicolas l'Hoste, betrayed the most important despatches to the Spaniards, so that the instructions for the French ambassadors usually came to Lerma's knowledge before they did to that of the persons to whom they were addressed. This game lasted several years, till at length (May 1604) it was betrayed by another spy. l'Hoste was drowned in the Marne in trying to fly, and the French had to content themselves with tearing his body into pieces by four horses on the Place de la Grève.

We cannot follow our author in detail through his representation of the struggle between French and Spanish influence in the most different regions—in Switzerland, Italy, England, Germany, as also in the East. Once only the Spaniards had the advantage. In especial it was an inestimable gain when the death of Elizabeth in 1603 rid them of their most dangerous foe, and they could enter into friendly relations with her successor, King James. But in most cases they failed against the strong and skilful policy of the French king. In Italy the Duke of Savoy passed over to Henri's side, especially after the attempt to master Geneva by a night attack had failed (Dec. 22, 1602). Even in the conclave which followed the death of Clement VIII. French influence proved superior to that of Spain. The Cardinal of Medici, nearly related to the Queen of France, ascended the papal throne under the name of Leo XI., April 1, 1605. He died twenty-seven days after, but his successor, Camillo Borghese, raised to be pope, May 16, under the name of Paul V., was also more favourable to the French than to the Spaniards. With these events, and the relations of England to France and Spain, the first volume of this useful and attractive book comes to an end. We shall await the next with lively interest.

HERMANN HÜFFER.

A Translation of that Portion of Domesday Book which relates to Lincolnshire and Rutlandshire. By Charles Gowen Smith. Simpkin, Marshall, and Co.

VERY much will have to be done ere the Conqueror's Survey becomes as intelligible to students as we should wish it to

be, but that labour will, it is probable, take the form of commentary, not of translation. A very slight knowledge of Latin qualifies any one who possesses Robert Kelham's *Domesday Book Illustrated* for turning the record into English in such a manner as to satisfy most people who are not acquainted with the original, but it requires a combination of qualities such as are very rarely found, if indeed they have ever been found at all, to justify a man in undertaking the task of presenting a document so bristling with difficulties in a translated form. Mr. Smith is not the first person who has attempted to turn the Lincolnshire portion of Domesday into the vernacular. William Bawdwen, a Yorkshire clergyman, vicar of Hooton-Pagnell, published at Doncaster, in 1809, a translation of the *Dom Boc* for the counties of York, Derby, Nottingham, Rutland, and Lincoln. He was a good mediaeval scholar and a conscientious workman who availed himself to the utmost of the lights furnished by the elder antiquaries. As a translation we do not think any one at the present day could greatly surpass it, but it is devoid of notes, and the glossary is thin, poor, and inaccurate. Bawdwen had probably no personal knowledge of Lincolnshire. If he had known the county, he could not have been so much at fault as he constantly was in his identification of the Domesday villages with those to be found on the modern map.

Mr. Smith's translation differs but slightly from the elder one, the variations indeed are so very few that it is obvious, though he does not tell us of it, that Bawdwen's version is the basis on which his has been constructed.

Where differences do occur, Mr. Smith is almost always in the wrong, e.g. in the second line of the *Terra Regis* we find, "T'ra ad iiii car," that is, *Terra ad quatuor carucas*. Bawdwen renders this correctly, "Land to four ploughs," but Mr. Smith turns it into "The land is four carucates," and that this is not an accidental slip is proved by his translating, under Netelham, *Terra ad xiiij carucas*, "The arable land is sixteen carucates." In fact, this confusion between *caruca*, a plough, and *carucata*, a carucate or carve of plough land, runs through almost every page of the volume.

The practice of introducing explanatory words which are not in the text, as "arable" in the sentence last quoted, is highly reprehensible in all translations, except where the words so added are marked by brackets or a different form of letter; it is fatal in a book of this kind which, to have any value, must faithfully represent the minute peculiarities of the original.

The introduction deals with many subjects where we cannot at present follow the author, but a few words must be said concerning Mr. Smith's strange theory as to the derivation of the names of Lincolnshire towns and villages. He believes, in opposition to every competent person who has studied the subject, that they are all, not Teutonic, but Keltic.

"They are popularly, but very erroneously, supposed to have been to a great extent of Scandinavian origin. They are not Saxon or even Saxonized, but were fixed long before the terms Saxon or Danish appear as national denominations in the page of history."

Such is Mr. Smith's conclusion, and he supports it by an array of derivations which show that the late Mr. Godfrey Higgins, who, along with many other far more foolish guesses, suggested that Brimham, near Ripon, was derived from the Hebrew Beth-Rimmon, has still left a follower who is prepared to go all lengths in support of the exploded dreams of Kelticism. He tells us that Castlethorpe, a hamlet near Brigg, which almost certainly took its name from an earthwork there, is *Ka-cee torp*, "great mere or marsh village"; that Cameringham, which is named after a Teutonic mark, and has a sister

village called Cammerton, in Cumberland (Kemble, *Saxons in Eng.* i. 460), is *Ka-mæs lynn öm*, "principal mounds upon a lake-holm."

That Mr. Smith should reject the legend of the mythic Grim, the founder of Grimsby, is not surprising, though his effigy still does duty on the ancient seal of the borough, but it is really wonderful that the termination *by* does not convince him that, even if the Grim who has got into the local histories be as unhistorical as Pharamond, still the place must have been called after some man or woman so named. The law of the formation of names such as this is so well known now that the very strongest evidence must be forthcoming before it is admitted that a place in those parts of Europe where the Norwegians had settlements, whose termination is in *by*, is not in its earlier part composed of a patronymic. But the evidence here is all the other way. Grimsbury, Grimstead, Grimston, and Grimsthorpe are sister names in England, and Grimstad in Norway, Grimisay in the Hebrides, Grimm in Pomerania, and Grimberghen in South Brabant are most probably foreign relatives. The personal name Grim seems, too, to have been very common; a hunt among indexes would furnish scores between the sixth and the eleventh century. Jarl Grim flourished in England *circa* 950. There were coiners so named at Lincoln, Thetford, and Shrewsbury. Edward Grim was a monk who was present when St. Thomas of Canterbury was murdered. In the reign of John, Simon Grim, who had a ship also called Grim, flourished at Hythe, and in 893 Angelric, a priest of Vasnau, married a woman called Grimma; yet, notwithstanding all this, and the constant tradition of the place from an early period, Mr. Smith tells us, without doubt or hesitation, that Grimsby is *Grimmæs-buy*, "an abode at the sacred mounds."

The writer's belief in the Druids and Keltic matters generally has fortunately preserved him from discovering a shred of the Raven banners of the sea-kings in the name of the little hamlet of Renthorp. It would really have been a pardonable lapse into poetry if he had found here a memorial of the time when Witikind the sea rover

"enter'd the Humber in fearful hour
And disembark'd with his Danish power,"

especially as there is within a few miles a village, just on the Humber shore, called Whitton, which might have been made to do duty so admirably for Witikindton. He is true, however, to his theory, and gives us for Renthorp *Ra-avon torp*, "an elevated river-village." This is particularly unfortunate, as there is no river there, and the place is, and always has been, below the hill. There is no excuse whatever for trifling such as this, for the old name of the place, *Ragenal-torp*, as given in Domesday, carries its derivation on its face.

Bottesford is a name that there is good authority for blundering over. Abraham de la Pryme, more than a century and a half ago, made a guess that it meant the town of apples. This we always thought was as far away from the truth as it was possible to go, but Mr. Smith, who makes of it *Bö-dhal cee forde*, "the curved hill altar of a marsh township," has surpassed the Yorkshire antiquary, for apples do grow there still, but "horse-shoe shaped mound of worship" there is none, and, we may safely affirm, has never been. The meaning of the name is obscure, and the Domesday spelling *Budlesforde* does not help us. It may be from a patronymic, but it is more probable that the spelling *Botelford* (*Testa de Nevil*, p. 344) preserves the earliest form, and that the first syllable is *Bötel*, the Anglo-Saxon for a dwelling, to be found in north country names, such as Newbottle and Harbottle.

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Statements are continually made in this book without the

slightest reference to authority. For instance, we are told in one place that

"Learning and the alphabetical character, which first made the Angloish a vehicle of written literature was imported from Ireland" (xiv);

and in another that the Lagmen were "lawyers or lesser thanes" (p. 266). We really ought not to be put off with half knowledge. It is too bad not to inform us whether these lawyers were solicitors or only attorneys. It is not improbable this mistake has arisen from an attempt to translate *Homo legalis*—an expression almost certain to be found in any glossary which explains the word. In the introduction we are told that *Glenenwide* is the old name for Glanford Briggs, otherwise Brigg—a piece of information which is quite new.

In almost every particular this book is much inferior to its predecessor. It is but fair to point out, however, that in some instances Mr. Smith has been able to identify places which escaped the industry of Bawdwen.

EDWARD PEACOCK.

Intelligence.

Mr. Edward A. Freeman, the historian, whose excellent works are highly appreciated by competent German scholars, has been travelling lately in Germany with the purpose of studying the history and architecture of the early (chiefly Romanesque) minsters and churches. The route he has been taking, from Aachen and Köln up the Rhine, his visits to Loesch, Gelhausen, and Fulda, to Marburg and Limburg on the Lahn, will soon be traced in a new series of his well-known contributions to a weekly paper.

Many complaints have been made for several years past of the slow progress and deficient editorship of the *Monumenta Germaniae Historica* as well in the public press as more suitably by certain prominent historians. In consequence of a recent resolution of the Reichstag, further means for continuing this magnificent collection of materials for the national history are only granted under the express condition that, beginning with the year 1873, the direction of the work and the issue of its parts shall henceforth be under the superintendence of the Royal Academy of Sciences at Berlin. The great age of Dr. Pertz makes the substitution of a new editor-in-chief very desirable, and rumour, indeed, hints pretty distinctly that Professor Waitz, in Göttingen, will be the successor at a not very remote period. Nevertheless Dr. Pertz writes to the papers protesting that, unbent by the burden of seventy-seven years, and free from any illness whatever, he continues his daily labours as he has been accustomed to do for the last fifty years. In fact, a new volume, the first of the third sub-division, of which nothing had been heard since the publication of the plan in 1824, a volume containing the *Diplomata and Charters* of the early kings and emperors, edited by Dr. Carl Pertz, is just leaving the press, and is expected to give rise in a more than usual degree to controversy among the small learned fraternity who really know how to edit charters.

On the 9th of July the statue of the great Baron Stein, erected most picturesquely amongst the ruins of the castle of his ancestors near Nassau, on the Lahn, was inaugurated in the presence of the German Emperor, the Empress, the Crown Prince, and a very select circle of distinguished politicians and patriots. Stein, when Prussian minister in 1807 and 1808, was the reviver of the almost forgotten principles of German self-government. After having had the honour of being personally outlawed by the first Napoleon, he returned under the victorious colours of the Allies in 1812 with the plan of a truly national reconstruction of Germany. It was he, too, who started the scheme of publishing the *Monumenta Germaniae Historica* in 1819, and in 1823 placed Dr. Pertz at the head of the editing staff. The presence of the latter at the inauguration of the statue of the great baron, whose very substantial biography he published about twenty years ago, was appropriate, and would have been highly grateful to the original.

The *Memoirs of the late Baron Stockmar*, which have just been issued by the firm of Vieweg, in Brunswick, selected and most carefully edited by his eldest son, cannot fail to meet with very many eager readers both in Germany and in England. Though the most intimate relations by which Baron Stockmar was attached to the late king of the Belgians, and to Queen Victoria and the Prince Consort, as well as to some of the leading statesmen of the time in the several countries, are more or less indistinctly known, the public at large has hardly ever been informed of so much sterling wisdom and goodness as was to be found in this extraordinary and most unpretending man. While he shunned on principle every unconstitutional influence whatever, he became the oracle of the highest, the worthiest, and the most intelligent of his

contemporaries. From the Greek candidature of Leopold and the erection of the Belgian kingdom onward to the marriage of Queen Victoria, to the Spanish marriages which lost Louis-Philippe his crown, the Frankfurt diet in 1848, and the regency of the present king of Prussia and emperor of Germany in 1858, the readers will be fascinated by many a disclosure from the most authentic papers and memoranda. They are printed more or less in full, and form the chief contents of the present volume, which, as we are told, will soon appear in an English translation, edited by a rising diplomatist, Mr. J. D. B. Morier.

The fierce struggle which has broken out at last between the central government of the German Empire and Roman Ultramontanism is calling forth a great number of books and pamphlets on either side. Whoever wishes to inform himself thoroughly of the present state of the law regarding the limits of Church and State, and about the literary and historical materials in detail, will find the most complete collection of information in the new (the seventh) edition of Richter's *Lehrbuch des katholischen und evangelischen Kirchenrechts*, the work of Dr. R. W. Dove, professor of canon law in the university of Göttingen. In the chapters which treat of the pope and papal government of bishops and priests, councils and synods, all results of the decrees of the last Ecumenical Council are drawn out with masterly clearness.

New Publications.

- BORDA, J. J. *Historia de la Compañía de Jesús en la Nueva Granada*. 2 vols. Poissy : Lejay.
- ELLIOT, Sir H. M. *History of India as told by its own Historians—The Muhammadan Period*. (Revised and continued by Prof. J. Dowson.) Vol. IV. Trübner.
- HERRMANN, E. *Zeitgenössische Berichte zur Geschichte Russlands*. Russland unter Peter dem Grossen. Nach den handschriftlichen Berichten Joh. Ghilf. Vockehordt's u. Otto Pleyer's. Leipzig : Duncker und Humblot.
- HUGUES, Edmond. *Antoine Court—Histoire de la Restauration du Protestantisme en France au XVIII^e siècle, d'après des documents inédits*. Tomes I. II. Paris : Michel Lévy.
- MARKHAM, C. R. *Reports on the Discovery of Peru*. Translated and edited with Notes and an Introduction. (Hakluyt Soc.)
- SCHÄFER, D. *Dänische Annalen u. Chroniken von der Mitte d. 13. bis zum Ende d. 15. Jahrh. m. Berücksicht. ihres Verhältnisses zu Schweden und deutschen Geschichtswerken kritisch untersucht*. Hannover : Hahn.

Philology.

Miscellaneous Writings of John Conington. Longmans.

THE editor of these two beautifully printed volumes says in his preface, with truth and justice, that "the reputation of Professor Conington as a scholar will rest upon his editions of the *Chœphorœ* and of the works of Virgil and of Persius. As a translator he will continue to be known by his verse-renderings of Horace, of the *Aeneid* and of the *Agamemnon*. In the *Miscellanies* now offered to the public he appears both as a scholar and a translator ; but their distinctive mark is what, for want of a better phrase, may be styled literary versatility." The collection is indeed of a very miscellaneous nature ; many of the articles are of distinguished excellence, and will have an abiding value ; a few were written to serve a temporary purpose, and in all likelihood would never have been reprinted by the author himself. And yet the very slightest among them has a certain interest, and is so characteristic of the writer that there is not one of them which we should have liked to have seen rejected by their judicious editor.

The well-written memoir of the author by his friend, Professor H. J. S. Smith, prefixed to the volumes, tells the uneventful story of his life in a few pages concisely, but effectively. At the end of this memoir there follow about twenty pages of extracts from his letters, addressed almost entirely to a few of his younger friends and pupils, in which his modest and affectionate, yet acutely critical and scrupulously truthful, character is displayed to great advantage.

Conington's own contributions are headed by the essay on Pope, the longest in the whole collection, and one of the

most elaborate. The works of the poet, including the translation of Homer, are successively passed in review, and their merits and defects are dissected in a manner worthy of the editor of Virgil and the accomplished verse-writer and translator. He admires Pope, but not blindly, and with many reservations. If his estimate of the poet be on the whole higher than the average critical judgment of the day would be likely to sanction, at least if we may draw any inference from the poet's latest commentator, he never for a moment permits it to interfere with his perception of the transcendent merits of the older writers, "who have achieved triumphs of expression to which he was unequal, and struck chords of melody of which he never dreamed." The whole of the essay is marked by great moderation: to us the most interesting portions of it are the earlier pages, in which he discusses with much critical acumen the question of Pope's correctness, examines its quality, and points out in what sense Pope may be said to be a more correct writer than Shakespeare, for instance, or Spenser.

This first dissertation is followed by two popular lectures on *Lear* and *Hamlet*. If the preceding essay may be looked upon as showing the Virgilian side of Conington's mind, these two may be taken to represent its Aeschylean phase. It is more than probable that the author, always disposed to mistrust his own powers on ground which he had not by long pondering fully made his own, would not have thought of publishing these himself. We are however glad to have them. Of the two lectures the one on *King Lear* appears to us far the freshest and most original and best. It is curious and instructive to see how the writer sets himself to dissect the play as if it were the *Agamemnon* or *Choephoroe* of his own *Aeschylus*. Overpowered by the transcendent energy of the poet, he will see in him no flaw or weakness; will justify what many of Shakespeare's greatest admirers would only consent to excuse as concessions to the roughness of his times and his audience, for whose iron nerves no excitement was too strong. "It was necessary, in order to fill to the full our conception of Lear's sufferings, that we should know of what fiendish cruelty his enemies are capable; and this is impressed on us far less vividly when we simply hear that they have laid a plot against his life than when we actually see a venerable nobleman, who has rescued him from them, bound in his chair in his own castle and having his eyes torn out by the duke's hand. Thus we may feel that Shakespeare has really exercised forbearance and consulted how to spare the sensibilities of the spectator or the reader: he has not shown us the father actually exposed to the white heat of his children's hatred, but has left us to estimate its intensity for ourselves from the manner in which they deal with his preserver." Whether this unqualified defiance of Horace's laws of scenic propriety can be accepted in the present case, we dare not offer an opinion. The analysis, however, of the whole play is exceedingly suggestive and interesting, much more so, we think, than the equally elaborate, but less original, examination of *Hamlet*. His self-reliance seems not unnaturally to have somewhat failed him here; and he has been content to lean more on adventitious assistance in his dissection of the problems presented by this most famous of all tragedies.

The two lectures on Shakespeare are followed by a very long paper on "the English translators of Virgil," in which almost every version from the sixteenth to the nineteenth century is brought under review and weighed against its competing rivals. This was a subject of which Conington never tired, as was natural enough in so great a translator as he was himself. We fear we have not the requisite tastes and qualifications to enjoy as we ought this elaborate disquisition.

After this comes a series of six papers on Latin poetry in its various stages, which, as the editor justly observes, "will appear the most important section of the work," or rather, we should say, of the first volume. In these papers the whole field of Latin poetry is surveyed from Ennius to the silver age with much discrimination and much critical power. We have here in fact the results of what formed the main occupation of the most mature period of his life. The eloquent upholder of the supreme excellence of the Augustan poets, he at the same time does more than justice to the fragments of the early Roman tragedy, and on the whole metes out to Ennius his full share of praise. On the other hand, he scarcely appears to us to give the silver age its due in his two articles on Statius and Seneca. Surely the style of Martial is of as consummate a finish as that of Terence or Virgil. One of these essays, "The Style of Lucretius and Catullus," nearly forty pages in length, is a very full examination of a few sentences, not amounting to a page in all, in which the writer of the present notice had made some remarks on the preceding article, "Review of Munro's Lucretius." This is not the occasion for him to enter into a fuller exposition of what he now thinks on the subject: he will content himself with acknowledging how much he has learnt from the masterly criticism of this paper, and how deeply he feels the generous kindness with which he has been treated throughout.

In the lecture on the "Academical Study of Latin" we find in pp. 216-220 some very suggestive arguments on the advantages of the mental discipline to be gained by studying the classical languages. The whole of this essay is well worth pondering over at the present time, when the Latin writers are so bitterly assailed in so many authoritative quarters; when Mommsen, who has a more comprehensive acquaintance with the whole field of Roman antiquity than any other living writer, appears to find his highest enjoyment in pouring contumely on the heads of Cicero, the great representative of classicism, and of the two "court poets," Virgil and Horace. Hear what Conington says in pp. 207, 208:

"In speaking of Roman literature as imitative, it must not be forgotten that the reproach is not peculiar to it, but attaches to the whole of the literature of modern Europe. Greece, in its independent, instinctive development, set the example which subsequent nations have followed with more or less of distinctive consciousness. Even if we choose to consider this conscious effort after an external standard as fatal alike to national and individual genius, we must admit it to be an inevitable evil, involved in the very position of those who have a preceding civilisation to reflect upon. Rome may seem to have been more of a copyist than any of its successors, partly as being actually more indebted to Greece, partly from the lateness of its intellectual growth, which suggests the notion of rational deliberation rather than of creative energy; but the difference must not be exaggerated in either case. If modern nations have followed Greece less closely than Rome did, it is attributable to the fact, among other causes, that they have had Rome as well as Greece to follow; nor will the long barrenness of the Roman intellect prejudice the judgment of those who bear in mind that the Punic wars were in the life of the Eternal City only what the war with Persia was in the briefer history of Athens, and that even now the true literature of modern Germany, though one of the richest that Europe can boast, is scarcely more than a century old."

It is well to take these sentences, and indeed the whole essay, to heart, when one hears on all sides baseless talk of some "lingua rustica" spoken by the people, as different from the language of literature apparently as Italian is from the style of Cicero. As if the "lingua rustica" of the people of Rome and Latium was not nearer the language of Plautus and Terence, of Cicero and Caesar, than the "lingua rustica" of Boeotia was to that of Pindar, of Attica to that of Sophocles and Plato, or of England to that of Burke and Macaulay. We lately heard an eloquent historian refer to the sarcasm of Naevius on the Metelli as representing the

people's language in contradistinction to the exotic styles of the Ciceronian and Augustan periods. As if "Fato Metelli Romae fuit consules" was less borrowed from Greek models, less removed from popular apprehension, than "Romanos rerum dominos gentemque togatam"; as if the babble of Prudentius was not the bald imitation of imitations of the ages of Virgil and Seneca. But we have no space here to dilate further on this topic.

The two final papers in the first volume are reviews of Bishop Forbes' liturgical writings, and give an interesting picture of Conington's theological investigations, but above all of that noble candour and consistent courtesy which never seem to have failed him once in all that he wrote or thought.

The prose translation of Virgil, which occupies nearly the whole of the second volume, will be found to be a quite indispensable supplement to his edition of the poet's works. We do not hesitate to say that the translation of nearly every verse is more or less a commentary on that verse. The author had satisfied his literary feeling by his verse translation, and this prose one would appear to have been designed more for a commentary than a specimen of literary style and finish. Manifestly, too, as the editor remarks, it is in an unfinished state. This applies especially to the *Elegies* and *Georgics*, and perhaps, though in a less degree, to the earlier books of the *Aeneid*. The later books we have read through with undiluted pleasure and admiration, and we look upon them as a magnificent contribution to the elucidation of the poet's many difficulties. But this we would say of the earlier portions as well: even where we are disposed to dissent, we pause, reflect, and are edified. As a proof that in the earlier parts we have not always the translator's most matured views, we would refer to vv. 31-40 of the sixth Eclogue, where it will be seen that the translation is in harmony with the notes to the first edition, but differs essentially from those of the second. In these portions of his work, much oftener than in the latter, we find him making experiments as to how he can compensate in English for the far greater power the Latin possesses in giving emphasis by the position of the words in a sentence. Thus we have, Eclogue v. 22, 23, "Cum complexa sui corpus miserabile nati Atque deos atque astra vocat crudelia mater," translated, "When his mother, clasping her son's piteous corpse, is crying out on the cruelty of the gods and stars, as only a mother can"; Eclogue vi. 1, 2, "Prima Syracosio dignata est ludere versu Nostra nec erubuit silvas habitare Thalia": "First of all, my muse deigned to disport herself in the strains of pastoral Syracuse, and disdained not to make her home in the woods, goddess as she was." In Eclogue vii. 62, he thinks he must give point to "formosae Veneri," and translates, "Venus, beauty's queen"; and this makes him reproduce "Lycida formose" in v. 67 by "Lycidas, beauty's king," whereas these words of Thyrsis really answer to Corydon's "formosus Alexis" of v. 55, which is translated simply, "our lovely Alexis." Sometimes he would seem to accentuate overmuch the plain language of the poet: thus, Eclogue v. 54, "Et puer ipse fuit cantari dignus, et ista Iampridem Stimicon laudavit carmina nobis," is translated, "That glorious boy was a theme worthy of any one's song, and Stimicon ere now has dwelt to me with rapture on those strains of yours." He is often eminently successful in bringing out the full point and force of a metaphorical expression. Occasionally, however, in these earlier portions we find a metaphor ridden too hard, as in *Georgic*, iii. 180, "Aut Alpheia rotis praelabi flumina Pisae," "or to glide at Pisa by Alpheus' waters on wheels smooth as they." Surely the rattling and jolting of the wheels of a springless car over the hard-paved Hippodrome of Olympia must have resembled

as little as possible the smooth flow of a river. Again, *Georgic*, iv. 518, "Arvaque Rhipacis numquam viduata pruinis," is thus reproduced, "And fields whose marriage-bond with Rhipaeon frost is never severed." Surely "never widowed of Rhipaeon frost" would be sufficient here. Yet in every one of these instances, even where we do not approve, we find instruction and food for reflexion; and the inner sense of Virgil is brought more distinctly before the mind.

H. A. J. MUNRO.

T. Macci Plauti Trinummus. With Notes Critical and Exegetical. By Wilhelm Wagner, Ph.D., Editor of the *Aulularia* and of Terence. Cambridge: Bell and Daldy.

ENGLISH scholars who desire to gain an insight into the present state of the textual and metrical criticism of Plautus and Terence owe a debt of gratitude to Dr. Wagner, whose editions have done more than any other books written in English to put the questions at issue in a clear light, and to illustrate them with candid and sensible discussion. It is with great pleasure therefore that we read in the first lines of the preface to the little book before us that Dr. Wagner determined three years ago to prepare a complete edition of Plautus with English notes, of which the *Trinummus* is an instalment. Unless we except the late Professor Ramsay's unfortunately unfinished edition of the *Mostellaria*, English scholarship has of late been unfairly neglectful of Plautus, nor is any scholar more competent than Dr. Wagner to make good the defect.

The *Trinummus* now before us does not apparently aspire to the completeness of the editor's *Aulularia*: but, especially for schools, it will be found a very valuable book. Teachers in schools are generally thrown back upon Lindemann's three plays (*Captivi*, *Trinummus*, and *Miles Gloriosus*) of 1844, the commentary of which, though really serviceable in matters of interpretation, and perhaps not always sufficiently regarded by Dr. Wagner, is, in all points in which Plautine scholarship has really advanced during the last thirty years, far behind the time. As the *Trinummus* is a good deal read in English schools, we hope that this edition of Dr. Wagner will receive the attention which it deserves. If so, it will do much for the improvement of exact Latin scholarship.

The preface contains some brief discussions on various disputed points, and, among them, on our old friend the final *d* of the ablative and of adverbs, which, as the readers of the *Academy* are probably aware, Ritschl is inclined to introduce with some liberality into the text of Plautus for the sake of avoiding hiatus ("anginad acerrume" for "angina acerrume," and so on). A great deal of learning has been expended in Germany upon this obscure and difficult point: it is not only in history that, as Hegel observed, "eben eine dunkle und trübe Zeit ein besonderer Gegenstand und Anspornung der Gelehrsamkeit ist." With the majority of scholars in Germany, Dr. Wagner is against Ritschl in this matter. He relies especially (preface, p. iv) on Corssen's argument given in his *Aussprache, Vokalismus*, &c., 2nd ed. pp. 1004-9. Corssen brings forward a crowd of instances in which Plautus and his contemporaries elide the ending of the ablative, or use the later form before consonants, and argues from them that the final *d* cannot have been pronounced in the conversational Latin of Plautus' time.

This, like many of Corssen's arguments, is weighty and sensible, and requires a thorough and candid consideration. But Corssen does not seem to us to have done justice to all the points of the question. (1) He assumes that in those cases, contemporary or nearly contemporary with Plautus, where final *d* was written, it was not pronounced: and, while

he grants that Plautus may sometimes have *written* a final *d* to avoid a hiatus, he thinks that the actor most probably never pronounced it. Surely a most unnatural supposition, especially in the case of a writer for the stage. It is true, of course (as Corssen urges), that English and French orthography is a very bad guide to English and French pronunciation; but this anomalous state of things was probably almost unknown to the earlier worthies of Roman literature. Corssen does not, it seems to us, take sufficient account of the possibilities of different usages and different pronunciations in the common Latin of the time of Plautus. An instance from English literature will clearly illustrate our meaning. The third person singular of verbs in Shakespeare (except in the case of *hath* and *doth*) commonly ends in *s*: but Shakespeare will sometimes, for the sake of the metre, use the older ending in *th*.* Now supposing that the MSS. of Shakespeare were as far removed from the time of the poet, and gave as distorted a view of his real text, as those of Plautus: supposing that in the text, so mutilated, we found lines which only required an additional syllable to a verb in the third person singular to make them scan: supposing that our knowledge of Elizabethan grammar (outside of the text of Shakespeare) were only supported by a few state-documents contemporary with the poet, and a few fragments of contemporary literature: supposing that these documents and fragments gave us instances of verbs making their third persons singular in *th*, and that the MSS. of Shakespeare commonly presented *hath* and *doth*: in such a case an editor of Shakespeare who should endeavour to restore his metre, where possible, by the introduction of the ending *th*, even though the MSS. seemed occasionally to support him in the case of polysyllabic words, and almost invariably did so in the case of *hath* and *doth*, would probably be considered rash by the majority of contemporary critics; but he would, on the whole, have the right on his side. Now it is certain that in other analogous cases of grammatical usage Plautus did allow himself a variety analogous to that which we have pointed out in Shakespeare: he wrote (and surely pronounced) *postid* as well as *post*, *antidea* as well as *antea*, *med* and *ted* as well as *me* and *te*: why then should we judge of his usage with regard to the ablative by one set of instances alone? (2) Corssen attributes, as we think, too much weight to the authority of MSS. which, in the case of Plautus, an old writer and a writer for the stage, cannot surely be rated as high as that of contemporary inscriptions. However scanty the remains of the latter may be, Kitschl is right in pressing the evidence which they afford with emphasis into his service.

The notes are as a rule good, and contain a great deal of information. Something more might however, we think, have been done towards the illustration of the syntax and language of Plautus. There is no notice, for instance, of the tenses in v. 115, "haec, si mi inimicus esset, credo, haud crederet," where *fuisset* and *credidisset* would have been expected; of *fuerat* for *fuisset* in the phrase "aequius fuerat," vv. 119, 1038; of "deum me atque hominum pudet," v. 912; of "bene dicere homini amico, male loqui absenti amico," vv. 924, 926.

In a few cases, we venture to think a better interpretation might have been given than the one which the editor has adopted. In v. 345, "pol pudere quam pigere praestat totidem litteris," we should prefer to take "totidem litteris," not as = "though these words have the same number of letters," but as = "by as many letters as the word contains." In v. 482, "honore populi" surely means a "public office."

* *Romeo and Juliet*, act i. sc. 4—"She comes, In shape no bigger than an agate-stone;" and so on for some twenty-eight lines: but then, "Sometime she driveth o'er a soldier's neck," &c.

There is much more humour in making the *slave* say, "I will make way for him in everything, get out of his way when he is walking, not stand in his way in the competition for public offices," than in making him say, "I will yield to him in all things which concern the outward show of respect due to a free citizen;" how indeed could *honor populi* express the latter? In v. 1049, *probant* hardly = *existument*, but *aestuant*, as in Pers. 2, 2, 30, where nearly the same words occur. On v. 408, "holiores myropolae aucupes: confit cito," Dr. Wagner remarks, "is it not strange that the μυροπάλης should be mentioned with the greengrocer and poulticer?" It is possible that Plautus may have had in his eye the custom of using unguents as oil for herbs (comp. the proverb *rò ènì τῆ φακῆ μύρον*), which is known to have existed among persons of vulgar and extravagant tastes. In v. 526, "vinum pendet putidum" might have been well illustrated by "pendens vinum" in Cato, *R. R.* 147.

We conclude by offering one or two emendations. V. 368 as given by the MSS. gives no sense: "sapienti aetas condimentum sapiens aetati cibust." We would suggest that the words represent a proverb put into an iambic *octonarius*, wrongly introduced into the trochaic passage in which it now occurs, though good enough in itself:—

"sapientiae aetas condimentum, sapienti aetati cibus."

In v. 644, "atque honori posterorum tuorum ut *vindex* fieres," little or nothing can be made of *vindex*, unless the line be taken in connection not with what precedes, but with what follows: "tibi paterque avosque facilem fecit et planam viam." If with Dr. Wagner we join it with what precedes, *vindex* surely requires alteration. Is it possible that the word is a corruption of *ōvēdōs*? We leave the decision to critics more thoroughly acquainted with Plautus' use of Greek words than ourselves. In v. 749 the MSS. give either "ut" or "ipsum adeam Lesbonicum edoceam," &c. Dr. Wagner adopts Bothe's emendation, "ipsum adeas Lesbonicum edocum." "Ipsum adeo edreas Lesbonicum" would be an easy correction.

H. NETTLESHIP.

MARKHAM'S TRANSLATION OF OLLANTA.

TO THE EDITOR OF THE ACADEMY.

SIR,—There are a few points in the review of my version of *Ollanta*, that appeared in the last number of the *Academy*, the explanation of which will perhaps dispel the doubts of the reviewer as to the antiquity of that drama.

1. He thinks that the line, "Therefore my ears grow longer," can only apply to an ass, and that consequently it must have been written after the introduction of Spanish animals into Peru. But the *atoc* in the neighbourhood of Cuzco has long ears, and the two lines,

"Therefore my nose scents better,
Therefore my ears grow longer,"

are perfectly applicable to that animal. The introduction of *asnu* in the later versions is due to the blunder of a copyist.

2. The genitive *c*, *cca* is certainly archaic. It is never used in the country round Cuzco, and the old grammars prove that it never has been used for three centuries. If a Spanish priest had composed the drama, it is certain that he would have used *p*, *pa*. But the ancient genitive occurs in the old Ynca prayers preserved by Molina and Ynca Salcamayhua (MSS. at Madrid); which fact establishes the antiquity of the *c*, *cca* form of the genitive, and of any composition in which it occurs.

It is possible, but very improbable, that Dr. Valdez would have written a drama solely with a political object, and with the deliberate intention of excluding all allusions to religion. But it is not possible (and it was not necessary in writing for Indians in 1780) that he could have succeeded in absolutely excluding every Hispanicism, every foreign conception, and in using an ancient form, of the former existence of which it is not probable that he was aware. The difficulties of such a

theory appear to me to be insurmountable, while the simple solution of the question, by supposing that he told the truth when he said that his work was taken down from the mouths of Indians, offers no such difficulties.

CLEMENTS R. MARKHAM.

Intelligence.

It is now definitely announced that the last part of M. Littré's great Dictionary may be expected in November.

According to a Trieste paper, G. Corssen has ready for the press a work on the Etruscan language, which he maintains to be a purely Italian idiom, akin to Latin, Umbrian, and Oscan, and perfectly regular in its pronunciation and constructions. He has translated the Etruscan inscriptions in accordance with this view. His work is advertised in the last *Mittheilungen* of Herr Teubner.

Contents of the Journals.

The Indian Antiquary, ed. by J. Burgess; part vi. (Bombay, June).—The Muharram; a Shiah house of mourning in Madras; by C. E. Gover. [A brief description of the Shiah anniversary of the death of the Imâms at Kerbela, as witnessed at Madras. During the ten days of the feast lasts, water and sherbet are freely offered to any thirsty passer-by; as the Imâms, being cut off from the Euphrates for three days, were greatly tortured by thirst. The ceremony consists chiefly in chanting songs on Husain; Ali Akbar, his eldest son; and Abbas, his brother, and their deeds and sufferings at the battle of Kerbela.]—Folk-lore of Orissa; by J. Beames. [The writer thinks that, owing to the isolation in which their country has remained for so many ages, the peasantry of Orissa have retained old ideas and superstitions to a greater extent than any other Aryan people of India. The present paper treats of witches (including a *mantra*, or spell, in Uryâ) and similar superstitions.]—Bengali Folk-lore; by G. H. Damant. [Continuation; two other stories.]—On the Râmâyana; by Prof. A. Weber. Translated from the German by the Rev. D. C. Boyd. [Continued. Prof. Weber endeavours to show that, in consequence of the mutual relations which Alexander's expedition into India brought about, between the inhabitants of that country and the Greeks, some kind of knowledge of the story underlying the *Iliad* found its way to India.]—On the Ancient Remains in the Krishna District. [From the Report of the late J. A. C. Boswell, Officiating Collector, Kistna District. Continued.]—Forms of Government, &c. among the Dards; by G. W. Leitner. [On the political institutions, habitations, &c. of the Ghilgits and other Dard tribes.]—Miscellanies; Notes and Queries. [The Kangra fort and royal family of Katooch; a lake legend of the Central Provinces; Marco Polo's route from Yunan; the Hindu temple at Tripetty; the Samlaji Fair; discovery of images of Hindu deities at Velangani in Tanjore (images of the village goddess Pidari, of Pillayar or Ganesa, of Nâgesvara or dancing Siva, of Sandikesvara or Chandikesvara, and of Amman; these images, which are believed to have belonged to a Siva temple once existing at Velangani, have been bought by the government); &c.]

Bijdragen tot de Taal-, Land- en Volkenkunde van Nederlandsch Indië, derde volgreeks, zesde deel, 2^e stuk ('s Gravenhage, 1872).—Iets over von Rosenberg's Zending naar Nieuw-Guinea; door J. K. W. Quarles van Ufford. [Some account of the mission of Herr von Rosenberg, a native of Darmstadt, to the S.W. and N.E. coast of New Guinea, in 1858.]—Westerse Fabelen in een Oostersch Gewaad; door J. de Hollander. [Fifteen fables from Padang, translated, it seems, from European sources. The Malay text, with notes and a Dutch translation.]—Korte Opmerkingen over Balineesch en Kawi. [Grammatical, critical, and literary notes, communicated, from letters of H. N. van der Tuuk, by H. Kern. Also a Kawi passage giving a list of contents of the Mahâbhârata in Kawi, compared by Dr. Kern with the Sanskrit original.]—De Maleische Handschriften in het Britsch Museum; door G. K. Niemann. [The Malay MSS. of the British Museum here described are twenty-four in number.]—Kolonisatie op Java; door P. A. Leupe. —De Naamsopsporing van Java; door H. Kern. [The Sanskrit name of Yava-dvîpa was already known to Ptolemy in the sense of "barley island." This derivation has been doubted, on account of barley being no product of Java. W. v. Humboldt, R. van Eysinga, and Dr. van der Tuuk have derived the name from the modern Javanese *jawa* or *jawu* or Kawi *yrrva*, "outer," with Sanskrit *dvîpa*. Prof. Pijnappel has lately proposed to derive it from the Sanskrit *japâ* or *jabbâ*, which signifies the "Chinese rose." Prof. Kern rejects this derivation on phonaetic grounds, and recurs to *yava-dvîpa*, *yava* here probably meaning some other plant than "barley," which is not uncommon with names of plants and trees in different parts of India.]—Leestafel. [Short reviews of Dr. Hunter's *Our Indian Musalmans*; M. E. Buissonet's *De Pékin à Shanghai* (Paris, 1871); and Dr. K. v. Scherzer's *Fachmännische Berichte über die österreichisch-ungarische*

Expedition nach Siam, China und Japan (Stuttgart, 1872).]—Varia—Zesde deel, 3^e stuk.—De Smeekschriften der Malabaarsche Christen; door J. P. N. Land. [Brief historical account of the Syro-Christian communities on the Malabar coast; and translations, from the Syriac and Latin, of letters of Bishops Thomas and Gabriel, and J. H. Schaaf (1709–35), chiefly bearing on the relation of the Malabar Christians and the Netherlandish Indian Company.]—De Ocelalone ni ieole Aloe; eene Tominische Vertelling etc. door J. G. F. Riedel. [A tale and some popular songs, in the original Tominic, one of the four principal dialects of northern Celebes; with a Dutch translation and notes. Hitherto only a specimen had been published in this dialect, by the same scholar, in his *Bijdrage tot de Kennis der Talen en Dialecten etc.*, 1867.]—Geslachtregister der Vorsten van Sambas; door J. de Hollander. [The tables of the Sambas princes of Borneo, first published by E. Netscher, supplemented by various other writers, and re-arranged by Prof. Veth, are revised by the present writer, who has made use of a new copy of the tables.]—Geschiedenissen van Ratahan en Passan etc.; door J. N. Wiersma. [Legends collected in these two districts of S.E. Minahassa, chiefly bearing on early settlements, viz. of Lensang Aloe of Pontak, Londok of Tewoh, Makawâré of Toumbobeloe, and Potangkal of Taffoeré.]—Varia; door P. A. Leupe.

Hermes, vol. vi. pt. 4.—Haupt: Coniectanea.—Matzat: On the Credibility of the Herodotean Account of the Geography of Asia. [An important article of ninety-two pages, showing how far Herodotus speaks from personal knowledge of places, and how far he depends on the information of others. The writer maintains the view that the Cadytis of Herodotus was Gaza, and not Jerusalem, and argues against a recent theory which makes it a matter of doubt whether Herodotus ever visited Babylon.]—Kirchhoff: On Demosthenes de Cor. § 289. [The last line but one in the epigram is definitely attributed to Simonides by a scholiast on Gregorius Nazianzenus: we rejoice to learn that there is a prospect of the valuable scholia on Gregorius being collected and published.]—Rose: On Aristophanes *repl. Œuvr.*—Jordan: On the Orations of C. Gracchus.

New Publications.

AESCHINIS Orationes recensuit Andreas Weidmann. Berlin: Weidmann.

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HÜNNEKES, Dr. Kleine Beiträge zur Erklärung u. Kritik d. Thukydides. I. Th. Berlin: Weber.

INDISCHE STUDIEN, herausg. v. Albr. Weber mit anderen. 12. Bd. Die Taittiriyâ Samhitâ. 2. Thl. Kânda V.–VII. Leipzig: Brockhaus.

JOLLY, J. Ein Kapitel vergleichender Syntax. Der Conjugativ u. Optativ u. die Nebensätze im Zend u. Altpers. im Vergleich m. dem Sansk. u. Griech. München: Ackermann.

LÜBECK, Aem. Hieronymus quos noverit scriptores et ex quibus hauserit. Leipzig: Teubner.

MARIETTE-BEY. Les Papyrus égyptiens du Musée de Boulsq. Published in facsimile. Tome I. No 1 to 9. Paris: Franck.

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PLUTARCHI CHAERONENSIS Moralia ex recensione Rud. Hercheri. Vol. I. Leipzig: Teubner.

SOMMERBRODT, Jul. Luciane. I. Handschriftliches. II. Beiträge zur Kritik. Leipzig: Teubner.

TACITUS, C., a Carolo Nipperdeio recognitus. Pars II. Ab excessu divi Augusti Libros sex postremos continens. Berlin: Weidmann.

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ERRATUM IN NO. 52.

Page 269 (*a*), line 46, for "JOURNAL ET CORRESPONDANCE de André-Marie Ampère, publié par MM^e E. C. Hetzel. Paris: Techener"—read "JOURNAL Ampère. Paris: Hetzel."

POSTSCRIPT.—The *Athenæum* states that Mr. R. Simpson, the author of *An Introduction to the Philosophy of Shakespeare's Sonnets*, is editing a series of reprints of the more prominent plays that may be regarded as belonging to Shakespeare's school. The first of these, now nearly ready, is *A Larum for London, or the Siege of Antwerp*; and *The Life and Death of Captain Stukeley, Micedorus, Fair Err, Histriomastix*, and the *Prodigal Child*, are announced to follow.

THE ACADEMY.

"INTER SILVAS ACADEMI QUÆRERE VERUM."

Vol. III.—No. 54.

Readers are reminded that the mention of New Books, Articles, &c., in our lists is intended as a guarantee of their importance. The Editor of THE ACADEMY cannot undertake to return communications which are not asked for. The Editor cannot reply to questions from authors respecting the notice of their books. The next number will be published on Monday, September 2, and Advertisements should be sent in by August 28.

General Literature.

RECENT WORKS ON VOLTAIRE.

Voltaire et la Société française au XVIII^e Siècle. Voltaire et Frédéric. Par Gustave Desnoiresterres. Paris: Didier, 1870.

Six Lectures on Voltaire. [Voltaire. *Sixs Vorträge.* Von David Friedrich Strauss.] Leipzig: Hirzel, 1870.

Voltaire. By John Morley. Chapman and Hall, 1872.

To write the history of Voltaire is to write the history of his century. His influence told so deeply upon generally received habits of thought, and touched points so vital to the common beliefs of men, that his power was felt not only throughout the varied sections of the community of which he was a member, but availed to modify the existing conditions of European society. Materials lie about us in plenty, and there has been no lack of labourers in the field. They form a long list of names, which begins with Duvernet, and ends with Gustave Desnoiresterres, who in his valuable work, the fourth part of which has now appeared, fulfils all the most exacting requirements of modern science. For once the French man of letters has exchanged rôles with the German, and whilst M. Desnoiresterres takes upon himself the burden of arduous research, Dr. Strauss gives us an elegant abridgment of his labours. But then the subject is after all a countryman. Mr. Morley's position is totally distinct from both: he does not propose to rival M. Desnoiresterres by writing an exhaustive history of Voltaire, nor following the example of Dr. Strauss, to lay at the feet of an intelligent princess a finished and elegant memoir. Mr. Morley prefers to comment for us the essential points in his character, the critical moments of his life, just those facts in short which are significant to us of the nature and influence of this extraordinary existence.

It was in 1867 that M. Desnoiresterres gave us in his *Jeunesse de Voltaire* the first instalment of this biography. The appearance of each successive volume has called forth fresh testimony to the intrinsic merits of the work. The author has suffered no source of information, however remote, to escape his search, and he has applied to the treatment of the multifarious quantity of materials which he has assembled a cultivated intelligence and literary skill. The style is simple, the language at times even more than appropriate, and the grouping is managed with so much judgment as to effect that we are placed in possession of every possible detail without being oppressed by the sense of overcrowding. Chronology is one of the points on which M. Desnoiresterres has been obliged to bestow much attention. Voltaire himself was notoriously careless about dates, and his secretaries, Longchamp especially, seem to have followed

VOL. III.—NO. 54.

their master's example in this matter. The very date of his birth (November 21, 1694) was first placed beyond dispute by his latest biographer. And M. Desnoiresterres has not only brought into order the earlier years (which seemed in confusion past hope of disentanglement), but with unremitting care has verified every succeeding date, so that as far as he has gone we are now in possession of a thoroughly reliable chronology.

There is also another question which has inspired the curiosity and taxed the ingenuity of all who have approached the subject, viz. how did Voltaire obtain the princely fortune in the enjoyment of which he spent the last years of his life? To this ever recurring question no one as yet has succeeded in finding a satisfactory answer. If M. Desnoiresterres has not wholly explained away the mystery, he has at any rate indicated to us the direction in which we must look for explanation. The earlier biographers, like Duvernet, are all satisfied to remark that the gifts of the Regent, and the profits of *Oedipe*, placed him above requiring the aid of his family. But in his first volume, M. Desnoiresterres pointed out that the forty-five representations of *Oedipe* did not commence till November 18, 1718, when Voltaire was nearly twenty-five, and the gifts of the regent were bestowed at about the same date. It was on December 6, 1718, after his liberation from the Bastille, that he received from the duke of Orleans the gold medal and pension of twelve hundred francs. The papers of his father, too, contained proof that he was occasionally called on for supplies. The author quotes from the inventory taken at the death of M. Arouet, "Liasse 70, quittances relatives aux sommes accordées à son fils pour ses pensions depuis qu'il est sorti du collège." But M. Arouet did not, we may be sure, furnish his son with enough to support the expenses of a life which that son himself describes as a career of wild dissipation, carried on in the best society of Paris. Now and again Voltaire talks of money-lenders, and leads us to suppose that he passed his life in constant embarrassment. It is therefore with the utmost astonishment that we discover that in January 1722, at the death of M. Arouet, his son was already in possession of a small capital. Besides three "actions de la Compagnie des Indes," Voltaire had amassed about 5000 francs, which he had placed in the hands of his father, and this, too, at a time when he had only been three years in receipt of the regent's pension. So that throughout the years which he represents as passing in a career of reckless extravagance Voltaire was privately saving. Reckless extravagance laid the foundations of future fortune, just as idle dissipation produced *Oedipe*, *Artémise*, and *Henri IV*. Dr. Strauss in his preface quotes Goethe's remark that, just as now and again we see in old families that nature will bring forth an individual who unites in himself all the qualities of his ancestors, and shows in full perfection those peculiarities the existence of which in the race have hitherto been but indicated, so we sometimes see the virtues and vices of a great nation brought to a focus in one typical man. Thus in Louis XIV. there arose the typical king of France, and even so in Voltaire the nation found its typical writer. "Ne m'offusquez pas, car je veux paraître," said Henri IV. This "besoin de paraître," a distinct national peculiarity, was necessarily represented in Voltaire. "On a les défauts de ses qualités." This inborn necessity for striking an attitude explains away many of the at first sight contradictory tendencies which bewilder the student of his character. Voltaire's first impressions of cultivated life, as distinct from that of the middle-class, were received in the "société du Temple." Wit and dissipation seemed indissoluble companions. Voltaire's vanity was interested in assuming the outside of a fine gentleman. To parade the

airs of fashion and quality in the eyes of Paris was to increase his credit as an author, but he was too clear-sighted not to perceive that neither solid fortune nor reputation were thus to be achieved. Therefore, just as he studied and laboured in long intervals between revels which afforded him probably just that stimulus which was necessary to brace his nerves to willing work, so he strove at the same time to create for himself an income which should make him independent. But when he has to depict the situation, he has recourse to appropriate "décors du théâtre," to the heightening touch "qui fera bien dans le paysage." Mr. Morley thinks that "substantially Voltaire's transactions were very like those of any banker or merchant of the day." But M. Desnoiresterres, perhaps an even too impartial biographer, more than suspects the legitimacy of these dealings. Voltaire was sometimes unpleasantly canny in his choice of means to an end, and it is difficult to believe that his money transactions were governed by a loyalty which seems often to have been absent where his own advantage was concerned. He had access early not only to the salons of the great, but to those of the financial world, the attention of which had been drawn to him by his ode on the *Tribunal de Justice*, which had marked him out as one whose pen it might be worth while to conciliate; and his early training in Maitre Alain's studio had put him in possession of a kind of knowledge valuable both for the getting and keeping of money. If, however, there is absence of proof as to how the first small beginnings were made, it is now clear that skilful operations in the lottery of the "Ville de Paris" first put him in possession of considerable fortune, and from what we know of that transaction, and from his speculations in corn under the assumed name of Demoulin, in the rue de Long Pont, and again in provisioning the army of Italy, from all of which he derived enormous profits, we are justified in concluding that in the absence of any direct source of income, money was obtained wherever it could be got, without overscrupulousness as to means. There is nothing in such conduct incompatible with the rest of the character, nor at variance with the quality of that particular type of which he is the most brilliant example. He himself says that, goaded by the humiliations which had to be borne by the poor man of letters, he resolved to shield himself from them by the acquisition of a great fortune. This he did to spend, and not to keep. "Assez de gens méprisent le bien," says La Rochefoucauld, "mais peu savent le donner." Voltaire was one of these few, and as a rule practised, as Mr. Morley reminds us, the virtue of magnificent expenditure.

On this point, and indeed on every other, Mr. Morley may be read with advantage as a commentary on the store of facts which M. Desnoiresterres has brought into order for us. Mr. Morley brings not only just judgment but sympathetic insight to his reading of the essential features of the great French genius. He seizes the clue which alone can guide us through the apparent perplexities and strange involutions of Voltaire's character. Instead of vainly trying to credit him with the more correct, ordinary, and pedantic virtues, he is everywhere found insisting on the intense generosity and sensitiveness of the man. People like Marmontel complained that he gave too ready countenance to worthless admirers and flatterers. This, Mr. Morley truly says, "had a source in his intense and sympathetic quality, and was an eager asking assurance from others that his work gave pleasure. The exact steady value to Voltaire of his sojourn in England is seized: "he left a country where free-thought was an empty watchword, and found a land where men, if they had rejected Christianity, had at least thrown themselves with grave faith on the disciplined intelligence

and its lessons." And again, "so real a mind would exchange with delight the poetised astronomy of Fontenelle for the sure and scientific discoveries of Newton." In regard to Mme du Châtelet and her relation to Voltaire, much is said marked by the same quality of just and intelligent perception. But Mr. Morley hardly seems to indicate with sufficient force the existence in her of that depth of warmth and passion, coupled with the power to bestow "imperial sympathy," which was first indeed revealed to us in the unpublished letters furnished by M. Feuillet de Conches to M. Desnoiresterres for his third volume, *Voltaire à la Cour*. Yet without this touch our conception of her must be incomplete. It is precisely this craving for heart affection which made her life with a man like Voltaire "extremely hard for her." In 1749 the tie came to an end, and Voltaire was "disastrously free." The Berlin court, but especially the French colony at the Berlin court, is admirably drawn by M. Desnoiresterres. It is a picture which cannot be regarded with satisfaction; to one of its most unpleasant passages—the Hirschel affair—he has given patient investigation. A lithograph of the original will of the jewels left with Voltaire by the Jew is given, and an examination of this will suffice to convince any unprejudiced eye that the worst part of the accusation against Voltaire—viz. that of tampering with the document—is undoubtedly false. "There is," says Mr. Morley, "no more pitiful leaf in the biographies of the great than Voltaire's quarrels with ignoble creatures, names which recall vulgar, dishonest pertinacity on the one side, and wasteful, undignified fury on the other."

Perhaps the chapter of Mr. Morley's *Voltaire* which deserves to be read with most attention is that headed "Religion." Here the relation and influence of Voltaire on religion and religious opinion will be found discussed for once from the standpoint of calm intellectual enquiry. The author dispassionately points out Voltaire's failure to rise to the highest points involved in the great debate, and how this invalidated all that he wrote on religion; how he missed the emotion of holiness, the soul and life of the words of Christ and St. Paul; how he had no ear for the finer vibrations of the spiritual voice. But Mr. Morley also recalls to mind that Voltaire lived when, as he himself said, "Here Calas is broken on the wheel, there Sirven condemned to be hung, further on a gag thrust into the mouth of a lieutenant-general, a fortnight after five youths condemned to the flames. Is this the country of philosophy and pleasure?" "We must never forget," says Dr. Strauss, "that it was the furies of St. Bartholomew, of the dragonnades, and of the crusade against the Albigenses, which turned their torches in the hands of Voltaire against Christendom. 'He who says, think as I do or God will punish you, will soon say, think as I do or I'll make you.' Has this saying lost any of its fearful truth because it is a hundred years since Voltaire wrote it down?"

E. F. S. PATTISON.

The Elegies of Propertius, translated into English Verse by Charles Robert Moore, M.A., late Scholar of Corpus Christi College, Oxford. Rivingtons, 1870.

MR. MOORE in his short preface apologizes for the attempt which he has here made to introduce Propertius to English readers. This he need not have done; except Catullus, none of the Roman poets is more real as a lover than Propertius; and no erotic poet, either Greek or Roman, has spoken in tones more complex and elaborate. As a study of language as well as metre these elegies cannot fail to be interesting, even if on moral grounds they have sometimes been considered, as by the late Dr. Arnold, dangerous reading for boys.

The translation is for the most part in heroic couplets ; but once or twice this rule is broken, e.g. v. 8, *Disce quid Esquitas*, where short lines in the style of Conington's *Virgil*, and v. 11, *Desine Paule*, where elegiac stanzas of four lines are used instead. The former of these exceptions can hardly be considered happy ; the latter might, we think, be worked into something better. And this may be said of the translation as a whole. Considerable as Mr. Moore's success may be allowed to be, there are very few pages which would not be improved by an extra year's careful retouching. The faults indeed lie on the surface, and are the faults of immaturity : e.g. 's for *is*, *I'll* for *I will*, *I'm* for *I am* ; or grammatical inaccuracies : e.g. *Like she* for *Like her*, *had broke* for *had broken* ; or bad rhyme, like *war*, *before*, *borne*, *dawn*. There is besides this much laxity in proper names ; *Mys* appears as *Myos*, *Myron* as *Myro* ; the familiar neuter *hippomanes* is transformed to a female *Hippomane* ; the modern *Tivoli* figures side by side with *Praeneste*, *Bevagna* (*Mevania*) by *Clitumnus*, *Alba* by *Nemi*, p. 105 ; and *Dorica castra* is translated "Doria's chivalry," an expression which recalls Genoa and the great Genoese admiral rather than Troy and the Greeks encamped before it.

The following is a fair specimen of the translation, iv. 4, 7 :

" Now, school'd in warfare, spread the canvas wide,
Lead forth the coursers, knights, in all their pride ;
Go, Fortune smiles, avenge the slain, and be
One more bright page in Roman history.
Great Mars and Vesta's fateful fire, I pray,
Grant I may live to see that happy day
When Caesar's laden chariot sweeps along,
The steeds half fretting at th' applauding throng."

The four lines iv. 6, 30 sqq. are well translated thus—

" If tale so sad my Cynthia wept indeed,
Run back the way thou camest, run with speed ;
Weep, and be this the burden of thy song—
Wrath she may get from me, but never wrong."

The distich, ii. 18, 29, 30, is simply and effectively rendered—

" But thou wilt come adorn'd enough for me
If thou but come as often as may be."

On the whole, though marred by imperfections, this translation is not, as the author fears, a failure, and with more elaboration might be made a success.

R. ELLIS.

Correspondence and Conversations of Alexis de Tocqueville with Nassau William Senior. Edited by M. C. M. Simpson. King and Co.

THE proper subject of this work has been intrenched upon by two earlier publications ; the *Life and Correspondence of de Tocqueville* would have been incomplete without at least some of the letters of his oldest English friend, and it was impossible to omit from Mr. Senior's *Journals in France and Italy* all mention of his most able informant and most constant companion. On the other hand, the letters and conversations now collected have the appearance of a united and continuous whole, which cannot be said of a mixed correspondence or a miscellaneous journal, and in this case the whole is sufficiently valuable in itself, as well as sufficiently characteristic of its joint authors, to excuse the unavoidable repetitions of some interesting passages. To contemporaries Mr. Senior's note-books have all the interest of gossip, and we are content, as in real conversation, to run the risk of now and then hearing the same thing twice over ; but posterity may be less indulgent, and the journals have a right to look forward to its judgment, because of the solid kernel of instructive information which they offer, not so much to the historian proper as to the historian of society and of opinion. For this reason we should be glad to think that the present

arrangement is not final, and that when the volumes which now overlap have had their short day of success with the general reader, they will be succeeded by a complete and methodical edition of everything that the indefatigable author thought worth preserving. Voluminous and even tedious as the collection might seem, it is the best way of doing justice to Mr. Senior's peculiar gift, for no editor, however well informed, can hope to divine correctly which trivial fact, which careless prognostication will become luminous half a century hence, while yet it is a pious duty to see that no such chance is lost.

In some ways the volumes before us show better than their predecessors the precise nature of Mr. Senior's services to historical truth. In one letter he expresses a hope that de Tocqueville will not find him "an unfaithful Boswell," and if he had really stood in that humble and useful relation to any one, it would perhaps have been to the author of *Democracy in America*. But when we compare these notes with the records of his conversations with other celebrities of all sorts and sizes, we see how little his painstaking curiosity was dependent on the stimulus of admiration for the views expressed. His interest, and therefore ours, is much more general. The chief value of the correspondence with even this intimate friend is not biographical or personal ; it might, with perfect propriety, be called "The Opinions of a Conservative Liberal in England and France from 1835 to 1859," and neither its usefulness nor its literary attractiveness would be in the least impaired by the change. A Boswell undertakes his task either because he admires every individual utterance of his hero so much that he wishes none may be lost, or because on general grounds his admiration for the man is so high that he assumes whatever he says is valuable merely because he says it. It need scarcely be said that Mr. Senior's attitude to his examinees was very different from either of these. His own view of the matter appears in the following passage from a letter to Archbishop Whately :—" You must recollect that in all these conversations my object is to record what my companions said, not what I said myself. My own words are introduced as sparingly as possible, merely to render intelligible what was said to me. My journals are therefore full of most extravagant opinions and statements, unopposed, indeed uncommented on, by me—but certainly no more acquiesced in than what is reflected by a mirror is acquiesced in by the man who holds it." But the man who holds the mirror chooses the objects that shall be reflected in it, and is alone responsible for the choice ; Mr. Senior's originality lay in the manner in which he exercised it. Like a locomotive, permanent commission of enquiry, he took the evidence of any one who liked to offer it, but the persons he was at most pains to interrogate were—not those who could most easily turn their opinion into action, or whose opinion was of most speculative weight—but the representatives of an intellectual type, the men who make an opinion important by holding it, because they are certain not to hold it alone. Thus many of the remarks he has preserved are perfectly commonplace, and such as must have been made over and over again in dozens of newspapers ; true or false, the historian of opinion would not think of discussing them on their own merits ; but coming from the mouth of this or that distinguished public character, they are a part of the social and political forces actually existing, and it was the number and kind of these forces which Mr. Senior seems to have made it the business of his life to examine and appreciate. His task was the easier because he had no wish to shine himself, and was quite careless about convincing his companions ; sometimes he seems almost to play the part of an animated "man of straw," making just the

most obvious answers to objections so as to keep the discussion alive without really influencing its course. Even on points about which he felt strongly he was never carried away by the spirit of debate so as to press his own advantage or expose his opponent's inconsistency. In return for this self-denial, he only asked his friends to let him help them to talk their best, and it is not strange that few were churlish enough to deny the modest request.

Unlike most political memoirs, his note-book is least interesting where it deals with historical luminaries of the first magnitude. As de Tocqueville warned him, such personages, when aware of his habit of reporting conversations, were careful only to say what would look well when written down, and though the lapse of time may make it interesting to know what, for instance, Thiers wished to be thought to think about French politics in 1854, what de Tocqueville and Ampère really did think is of more importance, because their influence was a constant and positive fact, which in the long run would outweigh any single diplomatic manoeuvre. Of course the question of paramount interest throughout these two volumes is that of the political future of France; even to English readers questions of domestic policy, like the new Poor Law or the Reform Bill, seem tame by comparison. And notwithstanding all that has been written to explain the possibility and the success of the Second Empire, there is still something to be learned from Mr. Senior's mirror, as it reflects the successive hopes and fears of men honest, intelligent, and even brave, yet perfectly incapable of providing a remedy against the evils they foresaw. De Tocqueville and his friends could calculate within a few weeks when the next *journée* in the streets might be expected; they had been talking familiarly of the *coup d'état* for months before it came; conditional prophecies of remarkable acuteness are too plentiful to be enumerated, and yet, when the day of danger came, these men, the best representatives of aristocracy in France, could do nothing for either themselves or their country but cry, "A Mazas," and once in durance, their chief feeling was one of relief that "the struggle was over" without fault of theirs. Manzoni gave as a reason for avoiding politics that he was "incapable of distinguishing between the desirable and the possible." De Tocqueville's weakness as a politician seems to have arisen from an over-anxiety to avoid that common snare of inexperienced statesmen; and in practice he carried caution so far as to amount to recklessness. In July 1851 he wrote, "The government which I should prefer, if I thought it possible, would be a republic; but believing its continuance impossible" he was content to trust partly to Louis Napoleon's incapacity, partly to his moderation to mitigate or abridge the despotism which he saw no means of resisting or averting.

The *Droit au travail*, second in importance of the subjects which recur in the correspondence, is treated in very much the same spirit. In his letters to Senior, he dwells on the fact that a poor law on the English model, "affording relief on terms less acceptable than wages," would not satisfy the hopes excited by the extensive socialist agitation. But whatever the faults of the English Poor Law, its use as a barrier against socialism depends on the peculiarity—much open to abuse—that a resolute pauper has the law on his side if he insists on spending his life in the workhouse. But in the speech which characterized socialism as "un appel énergique, continu, immoderé aux passions matérielles de l'homme," he argued at length against admitting the *right* of the poor to either work or relief, and insisted that the state should only organize "Christian charity." The most severely unpopular measure that an *Anglomane* political economist could invent would have been practical as com-

pared with such a suggestion, and such a suggestion made in May 1848 was little better than a mockery, as no one knew better than de Tocqueville when it was his turn to think instead of to act.

The difficulty of foretelling the course of history is very completely illustrated by the guesses as to the probable duration of the empire which were commonly made during its earlier years. M. Beaumont said, "I should give him fifteen years if I thought him capable of using the immense advantages of his position." Most of the other prognostications had a condition attached, and the prophets were generally right as to the different alternatives that were possible; only their calculations were apt to be disarranged by the one incalculable element, the personal character of the usurper. At other times a plausible conjecture turns out incorrect because one of the many influences that could affect the result was forgotten. There is an instance of this in the second volume:—"The corruption that infects the civil service must in time extend to the army, and make it less fit for service." 'Of course it must,' answered Tocqueville. 'It will extend still sooner to the navy. The *matriel* of a force is more easily injured by jobbing than the *personnel*. And in the navy the *matriel* is the principal.' Recent changes in the art of war have raised the importance of the *matriel* in the army, and the *personnel* escapes corruption best which is furthest removed from its seat. On the page before, we read, "No corruption that ever prevailed in the worst periods of Louis XV., nothing that was done by La Pompadour or the Du Barry resembles what is going on now," i.e. May 1853, for the date of these general statements is the most instructive part of them. This was the time when men's consciences were finding their price, and scandal of all sorts was so rife in society that de Tocqueville thought the reign of *fripouillerie* could not last much longer; but by 1857 things had found their level: Paris was peaceable, and, for the first time for many years, Paris was dull; the Bourse was the one excitement, extravagance the one employment. When the price for which men's consciences had been sold was all spent, scandal revived, and the virtuous indignation of *La Lanterne* had all the effect de Tocqueville anticipated.

The conversations are not all political; those of a miscellaneous nature are worth reading, though not perhaps worth quoting. A good story is told of Nicholas and Lamoricière, who had been sent to praise the republic to him in 1848. The czar replied, "My good friend, there was no need to tell me all this: I have not the least wish to interfere with you. Whether you have a republic, or a dictator, or an emperor, I do not care a rouble. The only government that I cannot tolerate is a constitutional monarchy, and in your case I see no immediate danger of that." It is not quite evident upon what principle some of the speakers in the journal appear only under initials, as they are for the most part identifiable with persons elsewhere mentioned by name. Another superfluous precaution is that of giving the original of de Tocqueville's comments on Mr. Senior's memoranda; the translation, which is quite trustworthy and idiomatic, would have been enough for them as well as for the letters. But these are trifling details: in the main, the editor has done enough, and not too much, to what under any circumstances must have been an interesting publication:

H. LAWRENNY.

LITERARY NOTES.

The 1207th volume of the Tauchnitz Collection of British Authors consists of selections from Shelley, preceded by a graceful and sympathetic essay by Miss M. Blind, which originally

appeared in the *Westminster Review*. Shelley has never met with anything like adequate recognition from the general public, and consequently he is the only one of the great group of poets of the beginning of this century, of whom it cannot be said that a trustworthy traditional estimate exists. In default of criticism Miss Blind presents the tradition of his admirers in its most intelligent form, perhaps her admiration of *Julian and Maddalo* is exaggerated; if it was inevitable to sacrifice something, we may still be permitted to regret that, while *Julian and Maddalo* is given entire, we have only the exordium to *Alastor*, and that such copious extracts are given from the *Revolt of Islam* as to leave no room for more than two acts of *Prometheus Unbound*. Though we think Miss Blind overrates the *Revolt of Islam*, there is undoubtedly, in the case of a poet like Shelley, in whom the constructive faculty was almost always completely overshadowed by the prodigious development of other and higher faculties, a good deal to be said for the principle of giving extracts from a larger number of poems rather than a smaller number uncurtailed.

In the *Cornhill* some translations from an Arab poet of the twelfth century, Abu'l Fadhl Zoheir (b. 1186 A.D.) are remarkable for their very modern tone: the artificial polish which is characteristic of Arabian poetry in general makes way in his *vers de société* for comparative simplicity of language, and the fancifulness of his imagery is not much more strained than that of the Caroline poets.

In reviewing a French translation of Horace Walpole's letters in the *Revue des deux Mondes*, M. Caro brings out the ineffaceable influence of national idiosyncrasy in writings that would at first sight seem most free from it. Walpole's letters are almost the English equivalent of Madame de Sévigné's, the great object of his admiration, and yet, when reproduced in French, they constantly strike a cultivated reader as "Britannic" in animation and humour.

Prof. Gnoli, who is charged by the city of Rome with the task of marking the houses of memorable visitors with a tablet bearing their name, describes in *Im Neuen Reich* (July 19) the inductive process by which he identified the site of the house occupied by Goethe in 1786, but as the house itself has been almost entirely rebuilt since then, his ingenuity seems to have been somewhat wasted; but the German pilgrims to the Eternal City may be of a different opinion.

Music, Drama, and Painting.

The Works of Couperin. [Denkmäler der Tonkunst. Werke von Couperin; herausgegeben von Johannes Brahms. Erster Band: Clavierstücke, erstes und zweites Buch.] Bergedorf bei Hamburg: H. Weissenborn, 1871.

FAMILY likeness has been perhaps as often and as strikingly exemplified in a talent for music as in any other speciality of mind or body. With some of the greatest names in musical history more than one person, indeed many persons, of great ability are associated. The sons of Palestrina have been lost to posterity in the shadow of their father's greatness; yet all three, even the two who died young, were regarded with favour by their contemporaries. The brothers Anerio are in their works, and possibly in their persons, continually mistaken for one another, or supposed to be identical. Three generations have augmented, not, however, in an increasing ratio, the renown of the Scarlatti. Henry Purcell was not the only musician of his family; and William and Henry Lawes are rarely mentioned separately. The individuality of the elder Mozart would seem to have merged in that of his son, who by this time might have been as completely forgotten as any other of the juvenile prodigies who have succeeded him, had he not found in his father a teacher whose patience, discretion, and disinterestedness approached, if they did not attain to, the quality of genius. The excellent musicians who have borne the name of Bach, if not innumerable, have never been numbered. Even those

who attained reputations only inferior to that of John Sebastian form a considerable list. So with the name Couperin, which represents a family so remarkable that the author of the pieces which form the volume named at the head of this paper was distinguished from his father, uncles, aunts, daughters, nephews, and nieces as "le grand Couperin." The volume itself—an evidence alike of the catholic taste and industry of one of the greatest of living composers—is a very precious contribution to the archives of music; not merely interesting—though this is much—in so far as it marks the condition of a particular kind of art at a particular time, but as a collection of music, whenever and by whomsoever composed, at once beautiful and individual. It includes the first and second "livres," and therefore not all, of the "Pièces de Clavecin" published by their author in the years 1713 and 1716-17. Of these original publications—magnificent folios printed from copper-plates—copies, never very numerous, have now become rare and costly. Single pieces and even small collections of them have recently been edited by English musicians, the first of whom, I believe, was Mr. Lindsay Sloper. Before this, Couperin, save to the curious few, would seem to have been, during the present century, little more than a name, even among his own countrymen. Clementi's *Practical Harmony*, still the best collection of the clavier music of the last century, contains no specimen of his compositions; nor indeed, with the exception of an "Allemande" in Hawkins' *History of Music* (vol. v. p. 48), have I met with one in any work, German, French, or English, of more than ten years' standing.

The clavecin music of "le grand Couperin," of which the volume edited by Herr Brahms exclusively consists—practicable, it need hardly be said, on the clavecin of to-day, the pianoforte—is of two distinct kinds: dances, or more properly pieces, however developed, sufficiently marked in their rhythm to be danced to—gigues, menuets, gavottes, sarabandes, and the like; and what may be described by the modern familiar title, "songs without words." In the first of these forms, Couperin, relatively not merely to his contemporaries but even his immediate successors, is one of the most ingenious and pleasing of composers. He was the predecessor by nearly twenty years of Händel and J. S. Bach, and already a renowned composer and clavecinist when those great masters were practising their scales. Nevertheless not a few of his pieces in this first kind will easily bear comparison with all but the best of theirs. In the second kind, he has stood till very recently quite unrivalled. No doubt music suggested by some circumstance or thing, or rather the sentiment awakened by its consideration, had been attempted by French composers anterior to, and certainly known to, Couperin. None of these, however, not even Denis Gautier's *Tombau de Mad'me de L'Enclos*, has lived to impugn Couperin's originality. Nor, till very recently, have instrumental composers attempted to follow up the route in which Couperin, if he did not first enter it, made such way. For the volume before us consists in great part of these "songs without words," the variety in the titles of which perhaps exceeds that in the music to which they are prefixed. Couperin, like greater masters, occasionally repeats himself; or perhaps it would be fairer to say that many of his pieces are, or seem to us, very much alike. This arises partly from their brevity and simplicity in form; partly from the little variety of key employed in his age, though in this respect he is in advance of it; and, more than all, from his very frequent employment of the minor mode—the last trace of an unwillingness to accept our "natural scale," but the old masters' "modo lascivo." But Couperin's facility in the invention of titles is marvellous. Here are a few which follow in immediate succession: *Les Sylvains*, *Les Abeilles*,

La Nanette, Les Sentiments, La Pastorelle, Les Nonètes (sic)—première partie, *Les Blondes*, seconde, *Les Brunes*. The connection of these titles with the particular music which follows them is not always very obvious; as, indeed, is the case with a good deal of the music of our own time. A marked character is given to *Les Sylvains* by its limitation to the compass of the male voice, and in like manner to *Les Abeilles* by its “medium” pitch, tranquil motion, and limited range of notes. Couperin had certainly seen the bees

“murmur by the hour in fox-glove bells.”

But how *Nanette* differs from other young ladies, or what particular “sentiments” are suggested by the fourth piece in my list, are likely to remain puzzles “till time” and tune “shall be no more.” *La Pastorelle* always makes herself known and understood without difficulty; but *Les Blondes* and *Les Brunes*? How does my reader suppose they make themselves distinguishable? Both utter the same strain, but the former in the minor, the latter in the major mode! Now I assert, with little fear of contradiction, that nine modern musicians out of ten would have reversed this arrangement; would have felt the minor mode, with its average reticence and occasional volubility, the persistent sadness of its lower tetrachord, and the three varieties of its upper, to be more characteristic of the brunette than of the blonde, whose evenness of temper and clearness of thought would seem to find their juster expression in the natural scale. The choice, however, lets us a little into the composer’s tastes and likings. Certain it is, if anything certain about a man is to be gathered from his works, that Couperin, like his contemporaries, preferred the minor to the major mode. We are driven, then, inevitably to one of two conclusions: either that Madame Couperin was a blonde, or that Monsieur Couperin wished she had been. Having settled the domestic relations of the composer, to our own satisfaction at least, let us return to his music.

Couperin has many moods, but his prevailing mood is tenderness. In the volume before us the student will find many pieces characterized by strength, but many more characterized by sweetness. The composer has himself distinguished these in almost all instances by their titles. Thus the volume opens with a stately “Allemande,” which he has well named *L’Auguste*. This is shortly followed by an equally stately “Sarabande,” headed, *La Majestueuse*. Farther on, among the pieces of the “dixième ordre,” we find an extended “battle piece,” in which may be found a good many of the effects introduced a century afterwards by Kotzwara, as novelties; and near the close of the volume an essay in musical comedy, entitled, “Les Fastes de la grande et ancienne Mnxstrndxsx,” in the course of which we are introduced to “*Vieilleurs, Gueux, Jongleurs, Sauteurs et Saltimbanques*, avec les ours et les singes,” not forgetting the “invalides ou gens estropiés au service de la grande Ménes-trendëse,” whose performances come to an end in “désordre et déroute causés par les ivrognes, les singes et les ours.” These, however, present exceptions to the general character of the collection, in which titles and music answering to them abound like *L’Enchantresse, Les Idées heureuses, La Volupteuse, Les Papillons, La Pateline, and Les Ondes*, the most touching and elegant only of which I thought I had marked in going through them, for my own and my readers’ future reference. My marks are, however, too numerous to serve any purpose but that answered by notes of admiration. At the end of the volume will be found an “Expliqueation des agréments et des signes,” which should be carefully studied before any attempt is made to play the pieces which precede them. These “agréments” are not mere effects to be omitted at the will of the performer, but essential parts of

the music. It is greatly to be hoped that Herr Brahms will include in his collection of the works of Couperin “L’Art de toucher le Clavecin”—a short and well written treatise, now most rare, hardly less applicable to the keyed instrument of our day than of his, and from which the intelligent student may gather some idea at least of the manner in which the music of “le grand Couperin” and his successors should be played. One of not the smallest advantages which may result from re-publications like this which we owe to Herr Brahms may prove to be the restoration to the family of contemporary instruments of the harpsichord. Meanwhile, however, the pieces in them can be satisfactorily played on a pianoforte, and this by performers whose mechanical skill is a good deal inferior to their sentiment and intelligence.

JOHN HULLAH.

THE DRAMATIC SEASON, FRENCH AND ENGLISH.

THE season of French plays in London this year has been unusually long: but, with one or two brilliant exceptions, sterile of interest. Perhaps M. Félix had reckoned too surely on the expected visit of the Comédie Française, and had therefore neglected to provide other attractions. To begin with, the winter season was very discouraging. Everything, the weather, the illness of the Prince of Wales, the Christmas pieces, combined to keep the St. James’s Theatre empty. Moreover it is to be feared that London playgoers have no genuine love for French plays. The fashionable world will go once or twice during the season because it is proper so to do, and furnishes a topic of conversation: but the general public is too little acquainted with French to be able to follow a play with facility, and too indifferent to buy the piece first and study it carefully. This lazy temper is due, to a great extent, to the present condition of our own stage. One of our modern plays taxes the attention so little, possesses so few claims to literary or artistic merit, that persons naturally conclude that the plays of other countries are equally insipid. That few of the Parisian novelties were given to us was no fault of poor M. Félix. Play after play was submitted to the Lord Chamberlain, only to be rejected by that Cerberus of our dramatic purity. When such works as *La Baronne* or *Fernande* were forbidden, one wonders on what principles his licenser makes his selection. Nor does this wonder diminish when we see the actual plays that are allowed. If *Fernande*, one of the ablest and most powerful dramas, and, it may be added, one of the most moral, that have been acted in France for many years, is too highly flavoured for the chaste eyes and ears of English audiences, why allow *Madame attend Monsieur*, a piece whose nastiness is only equalled by its vulgarity? Who are Chaumont and Schneider that they should enjoy privileges denied to others? And yet, during the very seasons in which Lafont was forbidden to play *Les Vieux Garçons* and the Comédie Julie, the second of these ladies, Schneider, was kicking up her heels as high as she liked in *La Grande-duchesse*, or hiccupping in *Périchole* louder than ever she dared in Paris. And lately, after the pieces alluded to above had been forbidden, Mme Chaumont was allowed to act and sing nearly every piece and every song that she chose. Was *Le Ménage en Ville* a delicate or an improving comedy? Could in fact anything be much coarser? But the pass we have come to is simply this—we are allowed to do anything we like on the stage in England, provided we say as little as possible. Society winks demurely at the nudities of burlesque, and blushes with simulated modesty at the *School for Scandal*, which would scarcely obtain a license nowadays.

After a few performances by M. and Mme Lafontaine, and a long series by M. Ravel, upon whom, it must be admitted, age is beginning to tell painfully, *Christiane* was produced, a four-act play by M. Gondinet. It is difficult to understand the reason why this play should have been so successful as it was in Paris: particularly before so critical an audience as that of the Théâtre Français. When it is read, the characters appear unsympathetic, the action prolix, and the dialogue destitute of wit or sparkle. But on the stage, thanks to the art of MM. Delaunay and Febvre, and the charms of Mme Reichenberg, many of these defects vanish. Still it is a poor piece, and could not have done much to retrieve the fortunes of M. Félix, though it was

presented with much care, and the company played well together. Then we had M^{le} Adèle Page in several parts—of which perhaps the hackneyed *Adrienne Lecouvreur* is the best : M^{le} Fargueil in *Nos Intimes*, *Dalila*, and *Pattes de Mouches*—and lastly in *Rabagas*. By this time the company had been greatly strengthened, and the performance of the play was in every respect equal to the original one at the Vaudeville, and in some respects superior. As a social and political satire, it is difficult to overrate the merits of *Rabagas*, though as a play it is too long, and too deficient in interest. But nothing can be better than the conception of Rabagas himself : the noisy, pliant demagogue, who bullies his associates, and truckles to the prince—or than that of the prince himself, the very incarnation of high-bred gentility, kindly and humane ; and anxious, after his own fashion, to work out his people's good. Some of the smaller parts are excellent too. The chamberlain is a very humorous specimen of a court official ; and the republican coterie at the “*Crapaud volant*” is a singularly well-chosen assemblage of types, not too highly coloured, of extreme republicanism. The dialogue is admirable. Its shafts of wit and raillery spare no one : moderate men may laugh at the sarcasms levelled at their opponents, and communists rejoice that the party of order does not escape without a blow. Berton, who played Rabagas in London, conceived the part differently from Grenier, the original, who was specially chosen by the author to play it, and to play it in a particular way. He was noisy and blatant, and is said to have imitated Gambetta : Berton was voluble and oily, with an under-current of passion, that he could bring out upon occasion, as he does in the fine scene in act iv., when he flaunts the letter in Mrs. Blunt's face. M^{le} Fargueil acted the latter personage far more finely than M^{le} Antonine did. Her first scene with Rabagas was extremely clever ; she plays with the dreaded revolutionist, secure of victory in the long run, as a sportive spider might do with a rebellious fly ; and in the next act, when she has succeeded so far as to bring him to the palace, the scene in which she assures him he need have no fears on the score of what the prince may say or do, for “*Le prince, c'est moi*,” was a triumph of acting of the highest quality of comedy.

In Paris itself no new play of importance, except *Rabagas*, has been produced since the war. There have been however some very interesting revivals, especially that of *Ruy Blas* at the Odéon. It was very nobly played throughout, by performers of education and refinement, who understood the literary as well as dramatic importance of the work they had to interpret. This was especially to be noticed in M. Geffroy, formerly sociétaire of the Français. His Don Salluste was one of those perfectly beautiful creations of the dramatic art which can only be produced after a lifetime has been spent in the study and practice of it, added to the possession of great individual talent and personal gifts. He looked like a portrait of Velasquez stepped from its frame : dignified, sarcastic, devilish : every gesture, every look, even the most insignificant movement, had a meaning, and served in some way to elaborate and complete the most perfect picture of a cold and haughty Spaniard that could be presented on the stage. The Ruy Blas of M. Lafontaine was picturesque, but unequal. He began very well, telling the story of his love in an undertone of grief that was extremely touching, and denounced the greedy senators with much fire and scorn ; but his love scene with the queen was a sad failure. He ranted and flung himself into attitudes that were meant to move to admiration, but succeeded only in moving to laughter. However, he made up for all shortcomings by his performance in the last act. He left nothing to be desired in that magnificent scene where Ruy Blas faces Salluste at last, and exclaims with exultation,

“*Je te tiens écumant sous mon talon de fer.*”

Lemaître himself could hardly have been better : if indeed he was so good, for he never could have had the cultivation necessary for the adequate rendering of the poetic drama.

In London—apart from the usual dreary plays, to one or two of which the long-suffering audience has had the pluck to do summary justice—we have had some interesting revivals, among which that of Lord Lytton's *Money* at the Prince of Wales's must take the first place. The management has taken unusual pains with its production in every way ; and though faults may easily be found with parts of the interpretation, yet on the whole it is admirably rendered. And it must never be forgotten that the Prince of Wales's is the one theatre in London with a

company : a definite set of performers who are persons of talent, accustomed to play together, and of whom the very best are satisfied with small parts upon occasion for the sake of the work that has to be given. *Money* is full of small parts : but they are all good : on them the success of the piece depends : and they are nearly all associated with the name of some celebrated actor in the original cast at the Haymarket, which was exceptionally strong. At the Prince of Wales's they are all appropriately presented : the performers realise the character entrusted to them with intelligence : and if some old playgoer, whose recollections carry him back thirty years, should be crusty enough to maintain that they are not half as good as the originals, why, let him be set down as a grumbling, cross-grained, *laudator temporis acti* ! The Captain Dudley Smooth of Mr. Archer is quite admirable. He is new to the London stage ; and his acquisition for such a part as that is singularly fortunate. His quiet easy bearing, his cat-like step, his thin lips, long hands, pale face, and premature baldness, combine to realise to the life the portrait that the author has drawn of the consummate gambler, “who never inherited a sixpence, never spent less than 400*l.* a year, and never told a soul how he managed it.” It is difficult to imagine how Wrench could have been better : but it is said that he was. It is much to be regretted that the opening scene of act iv., in which Smooth leads Evelyn's tradesmen to believe that he is ruined, without committing himself to anything more definite than “*Have you been paid, Sir?*”—should have been suppressed. Mr. Coghlan gives us, for the first time, a thoroughly consistent, flesh-and-blood, Evelyn. Hitherto the part has been played in that stilted, pompous style that was thought proper for all meditative persons from Hamlet downwards, till Fechter banished it, let us hope for ever. Perhaps the highest praise that can be given to Mr. Coghlan is to say that he manages to make all the “tall talk” written down for Evelyn appear plain natural common sense—a feat that surely no actor ever achieved before ! At times he may be a little too brusque : but the author evidently intended that Evelyn should be downright rude at times to Clara Douglas, or too sharp in attacking the weak side of Sir John Vesey's character, or deficient in polish when doing the honours of his own house : but after all the adverse criticism that can be brought against him has had its say, one is compelled to admit that he is the one supremely able exponent of the part that has been seen in our time. It is a pity that Mr. Hare should have attempted to portray that bland and unctuous humbug, Sir John Vesey. His sharp, crisp manner is quite out of place there ; and he seems unable or unwilling to adopt any other. Miss Brough is a very graceful Clara, and Mrs. Bancroft, of course, an excellent Georgina : but Mrs. Leigh Murray is overweighted with the lively, audacious Lady Franklin : a part which would have been far more suitable for Mrs. Bancroft herself. But, whatever fault we may find, however justly we may criticize minor defects, *Money* is very well played at the Prince of Wales's, and the public evidently take a delight in seeing, what is so rare in England, a good play well performed. That the public does like good old plays better than indifferent new ones is proved by the fact that *London Assurance* lately ran for nearly two hundred nights at the Vaudeville, only to be displaced by that dramatic evergreen, *The School for Scandal*. The absence of anything like a school of acting in England becomes painfully evident when one of the old comedies is attempted. The language, the manners, and the dress are alike strange to the performers, who are infinitely more at home in the tomfooleries of burlesque. This is particularly the case at the Vaudeville, where the representatives of Sir Benjamin Backbite and Crabtree play leading parts in the *Very Last Days of Pompeii* afterwards, and have imported the airs of the burlesque into the comedy. The sight of so many people on the stage at once as are assembled in Lady Sneerwell's drawing-room seems to suggest a breakdown to their minds : and one cannot help fancying that their arms and legs every now and then give involuntary twitchings, and that a general dance of all the characters is becoming inevitable. That the actors should be strangely and incongruously dressed was only to be expected from the usual practice of our stage in these matters. Still, it is surely very odd that the style of a century ago should have been so completely forgotten as to admit the ludicrous caricatures one sees in what are called “costume pieces.” What would be thought of a gentleman who walked down Pall Mall in a dress coat, a

morning waistcoat, a pair of footman's breeches and stockings, and a coachman's wig on his head? Yet certain characters at the Vaudeville cut no better figure. Mr. Farren's Sir Peter Teazle is an accurate copy of one of his father's great parts, but, like all copies, wants energy and nature: it is sensible, however, and painstaking. The Lady Teazle of Miss Fawsitt is bright and animated. By far the best piece of acting, however, is the Joseph Surface of Mr. Clayton. Throwing aside all the traditions, he makes Joseph a gay man of fashion (as the play warrants him in doing) who is quite as ready as Charles for any intrigue that may fall in his way, only he is a calculating, hypocritical schemer. He is really in love with Lady Teazle, and only affects a devotion to Maria for the sake of her fortune. Mr. Clayton realises this view in a way that leaves nothing to be desired. His deference to Lady Teazle whenever they meet is admirable, and the love scene in act iv. as passionate as the dialogue warrants, and that is saying a good deal. To this fine conception he adds a perfect bearing, and a costume that is accurate to the minutest detail of the time.

Mr. Bateman's management of the Lyceum seems likely to bring forth good results. *The Bells* was a well-written melodrama, original in idea and execution, and admirably acted, not merely by Mr. Irving, but by the whole company. The production of *Medea* would seem to show that he is anxious to try whether poetic plays can ever again become popular in this country. That he should have selected the well-known story of "*Medea*" may excite surprise: for she is an utterly unsympathetic person, whose conduct almost justifies Jason's treatment of her; and the other people of the play are dummies—from that terrible bore Orpheus down to the two children. Moreover, the conception of the part is encumbered by the recollection of three great actresses—Pasta, Ristori, and Titien. Out of these unpromising materials, however, it must be admitted that Mr. Wills has made a very good play. His verse cannot be called musical or scholarly: there is no classical feeling whatever in his work from beginning to end: but he has cleverly arranged the story so as to keep its human side prominent: he has made some changes so as to bring forward Medea's love for her children; and he has introduced a very effective incantation, with the proper accompaniments of a darkened stage and a red light. But the demerits of the play are forgotten in the admiration called forth by the talent of the principal performer. Miss Bateman is not merely a clever exponent of the part: she is an artist endowed with real tragic power, who, whether in pathos or in passion, carries her audience with her, and makes them forget all that is stilted or absurd in the play in sympathy with the heroine with whom she has identified herself. From her performance of Leah it might have been expected that she would have been greatest in passages of indignant declamation; but this is not so. The scene in which she is threatened with the loss of her children develops in her a new power: that of touching her audience by her ability in depicting tenderness. Moreover, it is most agreeable to notice how Miss Bateman progresses in excellence. Her Leah was good: her Mary Warner was better: but in *Medea* she has made a decided advance, which augurs great things for the future. It is refreshing to think that we have at last a tragic actress: that if plays be only forthcoming, an adequate exponent will not be wanting.—Curiously enough, at this very moment the Théâtre Français exclaims that it has discovered a real actor—young Mounet-Sully, a pupil of the Conservatoire, who bids fair, they say, to rival Talma in his greatest parts—to be as a man what Rachel was as a woman: to achieve, in short, the highest distinction in his art.

J. W. CLARK.

ART NOTES.

The Imperial Austrian Commission has issued the programme and regulations in accordance with which the Imperial Government proposes to conduct the Exhibition of 1873. All applications and enquiries must be addressed, up to August 24, by British exhibitors, to the English Royal Commission, through the secretary, Philip C. Owen, Vienna Exhibition Offices, 41, Parliament Street, London. The Austrian commission will communicate with exhibitors from foreign countries solely through the commission appointed by each country for that purpose. The exhibition opens the 1st of May, and closes the 31st October,

1873. Lists are to be sent in of the exhibitors, together with the plan of space required, before 1st January, 1873. Exhibitors have to defray all expenses not provided for by the Austrian commission, which has made arrangements for the reduction of transport charges within its own dominions. Exhibitors of fine arts are exempted from any charge for space. Insurances against fire are to be effected by the exhibitor at his own expense, and he is also responsible for the packing, forwarding, receiving, and unpacking of his goods both for the opening and close of the exhibition. The objects will be submitted to the judgment of an international jury, and special regulations will be issued for the fine arts. Exhibitors receive tickets entitling them to free admission.

The *Gazette des Beaux-Arts* for Aug. 1 contains an important contribution from the pen of M. Henri Delaborde. The article in question is entitled "Les Estampes d'Andrea Mantegna," and forms part of a work on the Elements of the History of Engraving which M. Delaborde is about to publish. Independently of its critical value it will be read with pleasure on account of its intelligent and sound method, which is eminently just, and appropriate to the nature of the subject in hand, being equally distinct from the dryness of German matter-of-fact treatment and from the English mode of chronicling subjective impressions in euphuistic language. The designs reproduced are—the "Judith," engraved by Mocetto; "Saint Sebastian"; "The Virgin and Child"; and the "Entombment," engraved by Mantegna. The subject of this paper is specially the pieces engraved by Mantegna, and M. Delaborde does not enter into any appreciation of the value of the popular attribution to Mantegna of the designs for the Hypnerotomachia Poliphili, the importance of which in its bearing on the history of the architecture of the Renaissance has been estimated once for all by M. Darcel. Two points are specially well touched by M. Delaborde—first, the way in which Mantegna from the first strove to harmonize his archaeological aspirations with the suggestions of his own genius; and, secondly, the predilection he has shown for scenes of violent emotion: it is in treating these that he displays the most profound power of invention. Mere talent is all that he evidences in such subjects as have their chief significance in the sentiment of tenderness, or compassion; whereas in such compositions as either of the Entombments we have the accent of genius.—The remaining articles are—a useful paper on the Musée de Lille (first article), by M. Louis Gonse; a notice of contemporary engraving in the Salon of 1872, by M. René Ménard; a third chapter of the "Correspondence of Léopold Robert," edited by M. Charles Clément; a notice by M. Champfleury on a collection of comic drawings which belonged to Catherine de' Medici; the correspondence of the directors of the French Academy at Rome; the letters of Vien and Natoire (tenth article), edited by M. A. Lecoy de la Marche; Flemish artists of the Renaissance, by M. J. Houdoy.—Amongst the most noteworthy of the illustrations are MM. Lorsay's and Jobert's reproduction of Mantegna's engraving of the "Entombment"; the engraving by M. Gaillard of a bronze bust of Dante in Sir Richard Wallace's collection; and a very graceful and artistic engraving by Mlle Hélène Boetzel, from a drawing by M. Édouard Frère of "Children leaving School."

The Royal Archaeological Institute met on August 1 at Southampton; the concluding meeting was held on Thursday 8, and the following resolution was unanimously carried:—"That this meeting has heard with deep regret of the projected destruction of 'Caesar's Camp,' near Wimbledon Common, and wishes to represent to the Council of the Institute its earnest desire that they should take such steps as they may think best for the preservation of that ancient historical monument." If we had a Chief Commissioner of Works sufficiently educated to have a proper knowledge of his duties, the task of saving from destruction such an historical monument as this would not be left to the chance zeal of private societies.

The Russian empire has been amongst the most active of those states which have, since the second International Exhibition at London in 1862, turned their attention to the development of industrial art by the means of schools and museums. In 1864 there was opened at Moscow a museum attached to the

Strogonoff School, which had been at work ever since 1860 at the training of designers for manufactures and teachers for schools. Both these institutions are supported by the government : the school receives an allowance of 16,000 silver roubles, and is attended by about 209 pupils. Similar efforts are being made at St. Petersburg. It is proposed to enlarge the schools at St. Petersburg and Moscow, to increase the importance of the Moscow museum, and to place the provincial schools of drawing, together with those of St. Petersburg and Moscow, under one central direction.

The death of M. F. Gillot, which has just taken place at Paris, must not be left without mention. M. Gillot was the inventor of paniconographic engraving, the influence of which on the diffusion of illustrated journals and musical publications can hardly be appreciated too highly. Formerly everything had to be engraved by hand, but M. Gillot, by means of a long sought and carefully perfected method, solved the problem of cheap engraving. Drawings submitted to the action of the acid became in twenty-four hours thoroughly bitten in, so that an immense number of impressions could be taken from them. The works of Doré, Marcellin, Cham, Bertall, have thus been popularised ; even the *Gazette des Beaux-Arts* has more than once had recourse to this method.

The first part of the catalogue of the paintings contained in the museum at Madrid has at last appeared. It contains the Italian and Spanish schools. The second instalment is to contain the Flemish, Dutch, German, and French. With the second instalment, the editor, Don Pedro de Madrazzo, promises to give to the world facsimiles of all the most interesting signatures to be found on the various works which form this magnificent collection. M. Paul Lefort, in the *Chronique des Arts* for July 20, assures us that this laborious undertaking has been conducted with equal science and sagacity, and fulfils in every respect the most exacting requirements of curiosity and criticism. Don Pedro de Madrazzo has patiently analysed the archives of the palace, and the thousand curious details which he has found in them have been condensed into the notes with which he accompanies the description of every picture. In cases where the editor has had (in the absence of any certainty) to choose the most probable attribution, he invariably furnishes the reader with the text of all the documents on which he has founded his conclusions.

The fourth edition of M. Alfred Michiel's *Voyage d'un Amateur en Angleterre* has just been brought out by Renouard. This work has steadily gained in reputation ever since its first appearance.

The well-known artistic glass-painting establishment of M. Maréchal is about to be transferred from Metz to Blois.

Melkshott Court, near Romsey, the seat of Lady Ashburton, has been almost destroyed by fire, which broke out on Friday, August 2. The building is fortunately of recent date, and all the works of art (which were very numerous and valuable), together with the library, were preserved by the energetic exertions of the neighbourhood.

The fourth edition of the catalogue of the collection of portraits, which forms the chief feature of the Dublin Exhibition, is now published. Portraits too form, it is said, the staple of the fine-arts department of the Lyons Exhibition, which was opened July 7. M. de Rayssac remarks, in the *Chronique des Arts*, that there is little or no high art, and an enormous quantity of portraits rarely satisfactory, but, on the other hand, many remarkable landscapes and fine examples of still-life painting. These, he adds, are the usual features of contemporary exhibitions. A gallery for fine arts has also been attached to the Universal Exhibition for Domestic and Industrial Economy, which was opened in the Champs-Élysées, July 28. This exhibition will remain open till November 1.

On Saturday, August 3, the British Museum estimates were presented to Parliament by Mr. Walpole. Mr. Wood's estimate of the sum required for the completion of the excavations of the Temple of Diana at Ephesus amounted, said Mr. Walpole, to

6000/. The trustees of the Museum had applied to the Treasury on this subject, and the Chancellor of the Exchequer, "who took the greatest possible interest in these excavations," had at once stated his readiness to grant the sum required by supplementary estimates, 3000/. this year, and 3000/. next. It may here be mentioned that on the 2nd inst. the lowest drum of the *columna celata* found at Ephesus nearly entire (see *Academy*, vol. iii. p. 285) arrived at the Museum.

Amongst the most notable works of art which have lately changed hands we may specify — Gainsborough's full-length portrait of Sheridan, dated 1783, purchased by Baron Rothschild for 3200/. — At the sale of Mr. Curling's collection, by Christie, Manson, and Woods : Webster's "Village Choir," which fetched 766/.; Cooper's "Cows and Sheep in landscape," 462/.; Herring's "The Start for the Derby," 660 guineas. — At the sale of the Durand-Dubois collection in Paris, M. Charles Nuitier bought on behalf of the Opéra all the old drawings of the decorators and scene-painters Brongniart, Mauro, Ciceri, &c. &c., also two full-length portraits of Fanny Elsler by Deveria. There was a lively competition for a pencil-drawing by Eustache Lorsay of an ex-artist of the Palais Royal, M^e Laure Lambert, who is at present M^e Émile Augier. — On Thursday, August 6, Sir George Chetwynd's collection of English, Italian, and Anglo-American coins and medals came to the hammer.

A curious musical MS., containing the words and notes of Luther's favourite hymns, collected and arranged for him by his good friend, "Herr Johann Walther, Componist Musice zu Torgau, 1530, dem Gott gnade," has been lately carefully edited and reprinted in facsimile by O. Kade. Apart from the interest which attaches to the exact words, &c. used by the reformer in the domestic concerts of which he was so fond, the publication is of course very interesting to musical antiquarians.

New Publications.

- AUBERT, E. *Trésor de l'Abbaye de saint Maurice d'Agaune*. Paris : Morel.
- DIDOT, A. F. *Étude sur Jean Cousin, suivie de notices sur Jean Leclerc et Pierre Woeiriot*. Paris : Didot.
- GALERIE THÉÂTRALE, ou Collection de Portraits en pied des principaux acteurs et actrices français depuis 1552, gravés par les plus célèbres artistes, avec notices biographiques. Paris : Barraud.
- GOBINEAU, le Ch. de. *Souvenirs de Voyage*. Céphalonie, Naxie et Terre neuve. Paris : Plon.
- HARDWICK, C. *Traditions, Superstitions, and Folklore (chiefly Lancashire and the North of England) ; their affinity to others in widely distributed localities ; their Eastern origin and mythical significance*. Simpkin and Marshall.
- HITTORFF, S., et ZANTH, L. *Architecture antique de la Sicile. Recueil des Monuments de Ségeste et de Sélinonte. Suivi de recherches sur l'origine et le développement de l'architecture religieuse chez les Grecs. (Complément des ouvrages publiés 1826-30.)* Paris : Franck.
- MARESCHAL, A. *La Faïence populaire au XVIII^e siècle, sa forme, son emploi, sa décoration, ses couleurs et ses marques*. Paris : Delaroque.
- MORAND, Fr. *Les jeunes Années de C. A. Sainte-Beuve, suivies de réflexions et jugements de son père sur la Terreur*. Paris : Didier.
- OVERBECK, T. *Atlas der griechischen Kunstmystologie*. 1. Lfg. Leipzig : Engelmann.
- QUÉRARD, J. M. *Oeuvres posthumes ; publiées par S. Brunet*. Bordeaux : Dumoulin.
- TOURGUENIEFF, Alex. *Lettres à son frère Nicolas*. (In Russian.) Leipzig : Brockhaus.

Physical Science and Philosophy.

The Introduction of Cultivated Plants and Domestic Animals into Europe. [Kultuspflanzen und Haustiere in ihrem Uebergang aus Asien nach Griechenland und Italien, sowie in das übrige Europa. Historisch-linguistische Skizzen von Victor Hehn.] Berlin : Gebrüder Bornträger, ed. Eggers, 1870.

MAN'S efforts to supply his necessities or multiply his enjoyments, his strivings after "panem et Circenses," may seem to fall as regards the past entirely within the realm of the

historian, and as regards the future within the realm of the politician. But investigators, like other organisms, are mutually interdependent, and investigations regarding "all men's labour under the sun" must be largely biological if they are to be at all complete. For much of all that labour relates to organic nature, its processes admitting of being viewed as the selection, its results as the survival and predominance, of rival forms of life. The work now before us, Herr Victor Hehn's *History of the Introduction of Cultivated Plants and Domestic Animals into Europe*, professes to give us sketches of the history of the subordination of such plants and animals to man's needs so far as literary, that is, historical and linguistic, research can help him towards doing it. This profession, which is made upon the title-page, is fairly carried out in the body of the work; but in justice to the author we may say that he goes beyond his promises, and that the names of de Candolle and Unger amongst modern and those of Theophrastus and Pliny amongst ancient naturalists are to be found amongst his authorities, as well as those of the poets like Homer, and the historians like Herodotus, who give us so much more or less indirect information by making and omitting to make allusions to the natural history of their days. In one word, our author has to deal with an ethnographical and physico-geographical subject, and he has not wholly neglected its physical aspects.

If, after the fashion of a recent writer in the *Contemporary Review*, we take in the first place and as our surest gauge a purely quantitative estimate of Herr Victor Hehn's work, we must say that being but a nineteenth-century octavo of some 450 pages, it contrasts to disadvantage with such a vast and weighty folio as Bochart's *Hierozoicon*, which again, in its turn, must have looked but a pygmy by the side of the "ingens volumen" which Bochart himself speaks of with a shudder (*I. c. ii.* 814) as having been written by a certain Bustamantius, *de SS. Animalibus*. In all seriousness, however, the subject is a very large one, Herr Hehn speaking himself with great propriety of the literature bearing upon one single department of it as "unermesslich"; and it is all we can or ought to expect if within the limits just specified we have some of the relations which the entire subject has to the history of the progress of our species sketched out, and some of its special concrete examples worked out for us. This the author has done.

In his introductory pages, pp. 3-10, Herr Victor Hehn treats of the large question of the possibility of the restoration of certain of the countries of antiquity, such as Greece, to the condition of fertility which they enjoyed, or are supposed to have enjoyed, in the times of the ancient writers; and he does wisely in siding with Unger in holding that "the thing that hath been, is," or at least, with ordinary care, may be, "the thing that shall be"; and in repudiating the doctrine of necessary decadence and exhaustion embodied in the words *loci senium*, endorsed though it be with the names of Fraas and Curtius. The very simple precaution of preventing the goats from destroying in Greece, as they have all but finished destroying in St. Helena, the forest-trees, by cropping their early buds, would enable the inhabitants to dispense with artificial plantation; and at the same time Herr Hehn points out that the utterances of the ancients are not all unanimously in favour of green fields and purling streams having been the characterizing features of the landscapes they lived in, for that the "woods which cool Ilissus laves" were not planted in what had been previously a bare treeless Attica till the time of Pisistratus (see Dio Chrysostom, *Or.* 25, p. 281 C), and that Plato years after spoke of the Ilissus itself as being but a rivulet, *ιδάριον*. Sophocles, we may add, would scarcely have devoted so many lines as he has done in the *Oedipus*

Coloneus, 668-705, to the description of masses of green foliage, of the trees which composed those masses, and of the nightingales which sang in them, if such a description would have applied with truth to other parts of Greece, or indeed to other *demes* in Attica. It is only after a long sojourn in London, or after a lengthy travel in some such country as Palestine, that green comes, in Sir Francis Palgrave's language, "to comfort the eye and the mind;" and the force of such poetical description as the one we have just referred to was the force which is given by contrast.

H. Hehn notices the alarmist views of the agricultural chemist as to the exhaustion of the soil by the cropbearing to which it has been subjected for now so many successive wasteful generations. These too he sets aside, ascribing the decadence of agriculture in Greece to the non-adoption of scientific methods in the husbandry of the country, which *vera causa* again is the outcome in the last resort of the disadvantage which Greece labours under as compared to Italy owing to the large immigration of Slavonian, Albanian, and Turkish semi-savages, and the insecurity for and the paucity of capital which this calamity has entailed.

Ten pages (10-20) are devoted to a sketch of the condition of things which prevailed in the two peninsulas of Greece and Italy when the first Aryan immigrants (whom he does not suppose with Mr. Fergusson, *Rude-Stone Monuments*, p. 39, to have been "figured under the myth of the return of the Heracleidae") entered it. He draws our attention to the great advantage which accrued to the invaders who penetrated farthest south into the two peninsulae from the more intimate relations which they were thus able to enter into with the Phoenicians, who in those early days had attained so large a mastery of the arts and inventions which are prerequisites of civilisation.

Three more or less general *résumés* of the conclusions to which his special investigations have led him are to be found in different parts of the book, pp. 314-316, pp. 355-368, and pp. 387-395; but the bulk of the book is made up of accounts, which begin immediately after the sketch of primordial times just alluded to, of the introduction and adaptation to human uses of various plants and animals. Herr Hehn's general surveys and summaries, even when we rank his introductory pages with them, fill up but some forty pages, but they contain a very large number of highly suggestive and thought-awakening general principles which vivify, whilst they help us to colligate, the vast mass of details which some threescore and ten special investigations entail upon his readers. The portentous load of concrete facts which his memory has had to carry has not deprived our author, as it deprives so many men similarly conditioned, of the faculty of graceful and artistic exposition; and the effects of intercourse are shown to have manifested themselves pictorially, or rather to have been measurable picturesquely, by the changes they produced in external organic nature, or, in one word, in the *landscape*, as plainly as, or even more strikingly than, by those other changes which are more usually held to be exact measures of the progress of civilisation. The characters given by the annalists to Tullus and Ancus do not differ more from those given by the historians to Pompey and Lucullus than did the landscape presented by early Italy differ from that of Italy in the first century before our aera. Oaks, limes, beeches, and pines clothed the hill—and indeed the mountain sides of Italy in its pristine days, but these trees had given way to the chestnut, apple, mulberry, cherry, and plum trees of man's introduction, whilst the olive, vine, and fig had occupied the lowlands when Varro (fl. B.C. 116-27) was justified in saying that Italy was so planted with fruit-trees as to look everywhere like an orchard. We doubt, however, whether the Ciminian wood,

which Livy (9, 36) and Florus (1, 12) in their rhetorical language compare with the German and Caledonian forests of their own day, could have coexisted with Etrurian civilisation even in the early periods indicated to us by the legend of the Tarquins; large forests and high civilisation being incompatible. At any rate Herr Hehn, in quoting Livy's words, and Livy in quoting the annalists' words, as to the existence of such a barrier against the march of an army some forty miles northwards of Rome in the year 308 B.C., should have pointed out that they were inconsistent not only with the whole condition of political and military movements described as then prevailing, but also with the account given (Livy v. 32) of Roman armies and their expeditions nearly a century previously. But we would also remark that the postdating of the persistence of the forest with all its characters of "in via atque horrenda" into the days of Papirius and Fabius shows that the early annalists must have dwelt upon those characters with considerable force and iteration in telling or distorting the legends, which we suppose to have really belonged to those far earlier times in which Tuscan power was yet but half developed, whilst Rome existed but in the embryo form of a small community tolerated in semi-independence partly on account of its insignificance, partly on account of the isolation which the legend, speaking so strikingly of the existence of woods, shows us that woods may have secured for it. We should also demur to Herr Hehn's ranking the Etrurians with the Indo-Europeans (p. 15), and to accepting the legend of their entrance into Italy having taken place from the north, and should use his own elegant analogy drawn (p. 389) from the fact that our best fruit-trees are the result of the engrafting of Oriental branches upon Western stocks to express the relation which was really held by the complex result of Roman culture to Etrurian and indigenous factors respectively.

Herr Hehn has well pointed out (p. 359) how ruinously one of the most prominent doctrines of the political economy of the old world, expressed by Cato in the words, "quae nasci in fundo ac fieri a domesticis poterunt, eorum ne quid ematur," or, he might have added, in the still older and equally foolish aspiration of Dicaeopolis (*Aristoph. Acharn.* 35), for the country where ὁ πρίων ἀπῆν, operated on the mechanical arts by checking the development of trades within the cities. But according to our author there was at work a deeper cause than even the non-recognition of the principle of division of labour to account for the stationary character of the mechanical arts among the ancients. They had, according to him (pp. 359, 360), no aptitude for the study of natural phenomena, living as they did in an ideal world, given up, as aristocratic castes are often given up, to the enjoyment of the artistic instead of to the pursuit of the real. But that he is wrong, at least from an aetiological point of view, when he says (p. 367) that what differentiates the modern from the ancient world is natural science, the arts, and political economy, as also when he says (p. 360) that the ancients lived immersed in dreams of religious fancy, and when he suggests (p. 361) that the evil influence of slavery (and the latifund system connected with it) may have been overrated, will be allowed by most persons. Again, it may be true enough (see p. 362) that the spirit of Christianity opposed itself to the Roman spirit of war, and that it was also so alien from the spirit of Roman law, in the codification of which the last manifestations of intellectual life under the empire were exhausted, that the name of scarcely one of the great Roman jurists can be pointed out as being that of a Christian, and that thus law and war, the two chief pillars of the Roman economy, were undermined by the new religion. But our author is at variance not only with himself, but also with the facts, when he hints that

the new religion was at all more opposed to the spirit of natural science than the mind of the old world had shown itself to be, and the remains of Pompeii, where want of comfort, where imperfection of apparatus and poverty of instruments are so strangely noticeable side by side with works of unquestionable artistic beauty, if not always of unquestionable taste, testify to this at the present day, as he himself remarks (see p. 360). H. Hehn, again, is only right to a certain extent in insisting (pp. 358, 359) that much of all the good which might have accrued from the road-making of the Romans was neutralised so far as purposes of commerce and trade were concerned by the imposition of heavy tolls upon traffic, by their system of monopolies, and by their prohibitory tariffs. For if we take, as our author insists we should take, the history of the introduction of domestic plants and animals as a measure of the freedom of intercourse existing at various periods in the civilised and semi-civilised world, the history of such a plant as the cherry which spread in the 120 years which elapsed between the period of Lucullus' Mithridatic war and the time of Pliny into Spain, Belgium, and England, must be taken as indicating the existence of a tolerably free system of interchange and of intercourse. The chestnut, again, another stranger from Pontus, must have spread with even greater rapidity, as Amaryllis, who lived, in imagination, a considerable time before Pliny, was acquainted with and indeed (see Vergil, *Ed.* ii. 52) not insensible to its merits. The parable of Jotham (*Judges ix.*), which H. Hehn assures us is now very little read, and which he consequently is kind enough to translate in full for his readers, shows us that the fig, vine, and olive were, at an early period, "dwellers in Mesopotamia and Judaea"; and though they were at a disadvantage as compared with the more hardy northward ranging plants just mentioned, which came, together with "nuts and almonds," from the Armenian region, they still had established themselves on the western shores of Italy before the period of authentic history. For in the legends the fig shelters Romulus and Remus and their she-wolf nurse; and though the law ascribed to Numa, and forbidding the use of wine for sacrificial purposes (p. 27), may seem to show that this "demoniacal drink," as Hehn calls it (*i. c.*), was looked upon in early Italian times as metal knives were looked upon by Zipporah, viz. as something too novel to be used in religious rites, still the legend does prove that wine was known at an early period in Italy, and at how early a period we can only guess, as the priests, especially if they looked upon wine as our author appears to look upon it, may have thought that no lapse of time would qualify such an invention for employment in their rites and ceremonies. The words, thirdly, of the old annalist, Fenestella, preserved for us by Pliny (*N. H.* 15, 1, 1), as they connect the date of the introduction of the olive with the name of Tarquinius Priscus, and so with the period of Etrurian influence, complete the chain of evidence; and we may further remark that, well suited to and indeed now even distinctively characteristic of the Mediterranean region though the olive be (Grisebach, *Die Vegetation der Erde*, i. 244), there can be no doubt that it was introduced into and not indigenous in Italy, and that its title, "bacca Sabina," shows therefore that this introduction took place at a period to which the memory of men reached not back, at least in the days of Juvenal. The peach (*Amygdalus persica*) and the apricot (*Prunus armeniaca*), coming from the parts of Asia which their scientific names denote, did not establish themselves in Italy till the first century of our aera, and we find no mention of them made in any writer of the Augustan age. It was left to the Moors and Crusaders to introduce the lemon, and, according to Hehn (p. 331), to the

Portuguese to introduce the orange, the "China orange" of some English writers, and the "Apfelsine" of the Germans, into Europe about the year 1548. The linguistic evidence for the introduction of the orange by the Portuguese may seem singularly complete, the modern Greeks calling the fruit πορτογαλέα, the Albanians *protokale*, the Italians *porto-gallo*, and, most striking of all, the Kurds *pottoghal* (*Pott. Zeitschrift für Kunde des Morgenlands*, 7, 113). But de Candolle (*Geographic bot.* 868) is of opinion that here, as in a good many other cases, reputation is in inverse ratio of desert, and that the orange, introduced from China at a comparatively recent period into India, was carried thence into Europe by the agency of the Arabs, Genoese, and Venetians some twenty-five years earlier than the date assigned by Herr Hehn.

If we lay aside the consideration of these somewhat small questions of priority, and look at the large-scale relations which have subsisted between India and China on the one hand, and Europe on the other, we shall note that, two thousand five hundred years before the days of Vasco de Gama, Solomon and Hiram contrived to introduce apes and peacocks into Palestine from India, and that with the exception of the sugar-cane, introduced, like the fiddle and the organ, by the Arabs, and the buffalo, Europe gained scarcely anything from India in the long period just mentioned. Surely the nations who extinguished Tyre, Sidon, and Carthage, must have been as much inferior to the Phoenician races in navigation and maritime enterprise as they proved themselves to be superior in military skill. What would Pytheas have thought if he had been able to foresee that Ireland would remain as little known to the Roman occupiers of Great Britain as New Guinea is now to the Anglo-Saxon and Celtic occupiers of Australia? How Pliny ought to have blushed for his countrymen when he had to confess that his knowledge of the Canary Islands had come to him but secondhand from King Juba! Herr Hehn says (p. 366) that the Roman empire might have been saved if it had been possessed of gunpowder, wherewith to keep back the barbarians, and of paper, upon which the entirety of Greek and Roman literature, including, we suppose, the writings of Crispinus, Fannius, and Tzetzes, might have been preserved, for use, we may suggest, in our public schools. But with the instances just given of the inaptitude for improvement, and of the slowness to exert itself for the benefit of mankind which the Roman empire manifested after it attained its definite establishment, we think mankind is perhaps to be congratulated upon the retardation of the invention of two commodities which might have secured a still longer tenure of power to the Italian mistress of the world.

It would be impossible, within the limits, we will not say of one or of two articles, but of very many articles of ordinary length, to follow Herr Victor Hehn through each of the detailed investigations into the history of our now familiar domestic animals and cultivated plants with which he has favoured us. There are about seventy of these histories, each one of which would furnish a large mass of matter for discussion; and the author goes beyond his undertaking as signified in his title-page, and adds to these old-world histories much that is interesting with reference to our obligations to America and her contributions to the landscapes and dietaries of modern Europe and Asia. He enumerates, and rightly, the Indian fig, the agave, and the Occidental plane, together with the potato, the tomato, and the tobacco-plant, but, whilst omitting the fuchsias, he adds to his list (p. 385) the Lombardy poplar (*Populus dilatata*), to which no American has, we imagine, since the time of the elder Michaux, made either direct or indirect claims. If men of science, who are, as Mr. Ayrton rejoices to think, but a

small minority of mankind, demur to this statement, the immense majority of mankind (who are not scientific) will demur to another made upon the next page, where our author discharges a copious vocabulary of abuse upon the habit of smoking tobacco. He calls it upon that single page (p. 386) a barbarous custom, "ein barbarischer Gebräuch," and a hateful habit, "eine hässliche Gewohnheit," and this so-called "fragrant weed" itself he styles a kind of poisonous nightshade, "eine Species giftigen Nachtschattens." In days when an attorney-general has been howled at by an untruth-loving multitude because he had called things by their proper names, we may mention with praise the wholesome habit which our author has of expressing his likes and dislikes in plain language; and if any of our readers are curious or anxious to know what Herr Hehn's feelings are towards Turks, Magyars, and Slaves, we may refer them to pp. 10, 364, and 425, where, whatever else they may object to, they will not have to object to any want of outspokenness.

A little more respect, however, for ancient literature, if for nothing else, might have saved our author from one of the few mistakes into which he has fallen, and would have prevented him from going out of his way (p. 181 and p. 435) and beyond both his authorities and the facts themselves to attack the correctness of the passages in Genesis xii. 16 and Exodus ix. 3, in which the camel is spoken of as being used in Egypt in the times of Abraham and of Moses. It is well known that Desmoulin long ago proved (*Mémoires du Muséum*, tom. x. p. 221, 1823), so far as literary evidence can prove such a point, that the camel was not largely used in Africa west of Egypt till a much later period in the world's history than the one we have referred to, but Desmoulin himself accepts the accuracy of the statements in the Pentateuch, and gives it as the result of his enquiry that Arabia, a country conterminous with Egypt, and Persia are the native region of the dromedary. But further, Mr. Horner (*Philosophical Transactions*, 1858, p. 59; cf. Lyell's *Antiquity of Man*, p. 35) and Lieutenant Newbold (*Proceedings of the Geological Society*, 1842, vol. iii.) have dug up dromedaries' bones in various deposits, alluvial and marine, in the Delta and on the west coast of the Red Sea respectively. We take this opportunity of saying that very strong evidence may be brought forward for the early and usually accepted dates of the books of the Old Testament in the same way as is done for those of the genuine Homeric poems, from the allusions they make to the plants and animals with which man is represented as coming into contact; and that this evidence may be brought out strikingly by a comparison of the real renderings of the Hebrew names of these animals and plants with the renderings given by St. Jerome, who learnt Hebrew only in middle life, and then assuredly imperfectly. The common fowl, for example, a bird the mention of which by the writer of the *Batrachomyomachia* proves him, as Payne Knight long ago observed (*Prolegomena*, vi.), to have been of a later than the Homeric age, finds a place some twelve times in the Vulgate as *Gallus gallinaceus*, though nowhere in our more correct version; and the tiger is found occupying in the former of those versions a place which in the latter is occupied, as in fact it only could have been, by the lion. Whatever such blunders as these may make us think of the learning (for learning alone, as distinguished from science, would have been sufficient to prevent the commission of them) of the early father in question, the fact that they are blunders, committed by him, and not by the writers whom he undertook to translate, is one which we commend to the serious consideration of H. Hehn as speaking somewhat plainly in favour both of the authenticity and of the authority of the writings which he sets aside so cavalierly.

In the two last pages of his text, H. Hehn has some remarks upon the numerical predominance which dark hair is gradually obtaining over light hair in the world as we now see it, and as this subject is of great ethnological and (if we may argue from the attempt of the late eminent theologian, Chr. H. Weisse [*Psychologie und Unsterblichkeitslehre*, p. 311], to correlate the colour of the hair and eyes with variations of our mental and moral nature) of even higher interest, we must point out a few particulars in which our author has fallen short either of completeness or of correctness. Firstly, Herr Hehn would have been liable to the charge of hastiness for arguing that the Scythians and Thracians of antiquity were dark-haired, because the Greeks and Romans, themselves a dark-haired race, would otherwise have stated that these two races differed from them in this particular. Secondly, as a matter of fact, the ancient Greek and Roman writers are not silent upon the matter; but when they do speak of it, they say exactly the reverse of what our author anticipates they would have said. Sidonius Apollinaris, in his *Panegyric on Majorian*, as also elsewhere, may not be taken as an undeniable authority, still the words, l. 218—

“Scythicisque choreis
Nubebat flavo similis nova nupta marito”—

count for something, and, when coupled with those of Clemens Alexandrinus (*Paedag.* iii. 3)—τῶν Ἐθνῶν οἱ Κελτοὶ καὶ οἱ Σκιθαὶ καμῶνιν, ἀλλ᾽ οὐ κομοῦνται· (κομοῦνται, see Cobet :) ἔχει τι φοβερὸν τὸ εὐτριχὸν τοῦ βαρβάρου καὶ τὸ ἐυθὺν αὐτοῦ πόλεμον ἀπελεῖ—the carry some weight. Galen, however, in his treatise *Iperi Kpárew*, ii. p. 627 (vol. i. ed. Kuhn), classes “the whole Thracian and Scythian race” with the Celts and Germans on account of their resemblance to them in this very particular of the hair. Though, as Dr. Beddoe, to whom we owe this last reference, has remarked, there is no subject upon which statements are so likely to be misleading and erroneous as statements made by any but good observers provided with standards of comparison, upon differences in complexion and colour of hair, we nevertheless believe that Herr Hehn is right in thinking that dark hair is becoming more and light less common in our own latitude and day as it always has been in Italy, and we think there is good evidence for this which his particular line of research should have drawn his attention to. Herr Hehn has in several places noted the singular fact that the useful invention of soap was due to the Northern and only adopted (and we may add, sparingly) by the Mediterranean races of Europe. He has not mentioned the fact that in many passages referring to this commodity it is said to have been employed “rutilandis capillis,” for the procuring that flaxen-coloured coiffure which was fashionable in the later times of the Roman republic and under the empire, as it is at present in England. “Prodest et sapo,” says Pliny, “Galliarum hoc inventum rutilandis capillis ex sevo et cinere.” The Roman matrons, however, had employed wood ashes, the really efficient agent in the compound just mentioned, for this purpose long before Julius Caesar had subjugated the Gauls; for Valerius (ii. 1), writing in the time of Sulla, tells us that they “summa diligentia capillos cinere rutilabant.” And light hair continued to be the fashionable, and, we submit, therefore, the less common, colour of hair down to the time of Tertullian at least; for he in his work *De Cultu* indulges in some ghastly mirth as to the evil omen which a flame-coloured head of hair might be taken to be as to the future life of the wearers who had taken so much pains to win it. The argument, that, if light hair is a thing which is fashionable, and for the procuring of which pains and trouble are laid out, it may be safely taken to be a scarcer thing than its opposite, will apply to the present day and to its

parallelism with the other centuries of which we have been writing.

English ladies who have hair of their own, though of the wrong colour, buy washes to make that colour “auricomous,” “regardless of expense,” as indeed they well might be if these washes, containing ordinarily simply nothing beyond chloride of lime, were priced at any price less than a thousandfold their intrinsic value; and to them Martial's line, xiv. 23—

“Caustica Teutonicos accedit spuma capillos”—

applies curiously. English ladies who have not sufficient hair of their own buy the natural hair of German women now as in the days when Ovid wrote—

“Jam tibi captivos mittit Germania crines,
Culta triumphatae munere gentis eris.”

What was written in the time of Arminius and Varus will apply to the time of Moltke and MacMahon; Mr. Hulke, one of the surgeons to the Moorfields Ophthalmic Hospital, informing me that it is an ordinary thing to find the German female patients at that celebrated institution wearing wigs, their own hair being sold and doing duty at the opposite end of London. It may be said that these are but coincidences, curious and close enough, it is true, but merely coincidences for all that. To this it may be replied that a plague-spot is merely a coincidence also, but that it has its significance as relating to conditions which are more than skin-deep. Let our readers lay alongside of such a description of the dazzling and squandering season of 1872 as appeared in the *Daily News* of Monday, July 22, and of Mr. Gladstone's boast as to the “leaps and bounds” which our prosperity is making, Livy's description of the life and manners of Rome in the “seasons,” with which he was only too familiar. It will be found in his *Præfatio*; a few words for it may end this article—“Nuper divitiae avaritiam et abundantes voluptates desiderium per luxum atque libidinem pereundi perdendique omnia invexere.” G. ROLLESTON.

The Philosophy of Shaftesbury. [Die Philosophie des Grafen von Shaftesbury. Nebst Einleitung und Kritik. Von Dr. Gideon Spicker, Privatdocent an der Universität Freiburg.]

DR. SPICKER'S book consists of a historical study rather singularly sandwiched between two expositions of the author's views on theology and philosophy: for though these latter are termed respectively “Einleitung” and “Kritik,” they have scarcely the shadow of a relation to the central portion of the treatise. The connection suggested in the preface is that Dr. Spicker has taken Shaftesbury as his “Vorbild” both in matter and in form. But, in fact, it is hard to say whether there is a greater contrast between Shaftesbury's effort to establish rational theism as the crown and culmination of philosophic morality and Dr. Spicker's conviction that reason and religion have nothing to do with each other: or between the urbane irony and serene contemplation of the peer and the inconsiderate violence, grotesque humour, and emphatic indecorum of the Privatdocent. It is hinted that Shaftesbury, like Shakespeare, requires a German interpreter in order that his merits may be duly recognised by his fellow-countrymen; and no doubt a certain disposition to depreciate him may be found in other writers besides Mr. Lecky, whom Dr. Spicker quotes. On the other hand, our author is apparently unacquainted with Mr. Hatch's elaborate edition, in which Shaftesbury's opinions on all subjects are treated with the most serious and respectful commentation; more so, indeed, than the polished essayist sometimes deserves or would have desired. However, even supposing that the fame of Shaftesbury needed rehabilitation, Dr. Spicker does not seem particularly well qualified for the task.

He is not sufficiently acquainted with English philosophy to exhibit the originality and importance of Shaftesbury's ethical views; while the theological portion of his author's work he seriously misrepresents by rendering it in his own very different temper. A writer who claims (in the *Miscellanies*) that he has always "forborne to mention any holy mystery of our religion or any article of our faith" would scarcely approve of an expositor who metamorphosed his elegant innuendo into a direct and violent attack on Christianity, by the simple process of leaving out the irony which is the most entertaining and characteristic quality of his style. Sometimes Dr. Spicker vulgarises this into coarse sarcasm; sometimes he does not seem to have caught it at all. For example, he seems to take quite seriously Shaftesbury's reference (while advocating good humour in religion) to the "playsome humour" of David, as exhibited in the "famous high dance" performed by him in a state—as he carefully notes—of nearly complete nudity. Apart from the carefully studied and artistically effective expression, Shaftesbury's criticism of historical religion is scarcely worthy of much consideration at the present time. His knowledge was not extensive or profound, and his application of it shows all the unhistorical intolerance of the eighteenth century; as even Dr. Spicker sees, in spite of the vehement unfairness of his own anti-Christian polemic.

And generally speaking, though Shaftesbury's importance in the evolution of English ethical thought is very great, on other subjects he hardly fills the place that his expositor assigns to him. His philosophical talent was considerable, but its development was checked by his continual dread of losing the gentleman in the philosopher. A theory of practice, he thought, the most rigid rules of good taste and cultivated sense could not forbid; but in the purely speculative region, though he showed himself acute enough in casual criticisms, he was restrained from any serious pursuit of truth by his gentlemanly-practical contempt for the absurdities of metaphysical pedants. Thus it seems extravagant to speak of Shaftesbury and Leibnitz as *co-discoverers* of Optimism: as if Optimism remained to be discovered in the eighteenth century, and as if there could be any comparison between the loose effusions of the "Moralist" and the elaborate and ingenious reasoning of the *Theodicee*. And there is a similar inappropriateness in the following account of the Letter to Somers on "Enthusiasm":—

"Seit Plato, an den er sich unmittelbar anschliesst, hat keiner diese Leidenschaft so klar und gründlich erfasst und ihr eigenes Wesen durch eine Fülle von Thatsachen aus der Geschichte und Erfahrung entwickelt und bewiesen. Nicht umsonst hat er dieses Schriftstück.... als Programm und Einleitung an die Spitze seiner Werke gestellt. Denn Moral, Kunst, Religion u. s. w. leitet er aus dieser Leidenschaft ab," &c.

Now Shaftesbury himself says of this composition, "The author cared not to grapple closely with his subject, nor to give us at once the precise definition of enthusiasm." And, indeed, here he does not appear exactly as a defender of enthusiasm: but rather as mediating between religious enthusiasts and polite society, which regarded their fanaticism as a malady needing severe treatment. He is chiefly concerned to impress on Somers and the public that a free play of raillery is the proper cure for this disease. Elsewhere no doubt he advocates more decidedly such temperate enthusiasm for beauty and virtue as he finds to be sanctioned by good taste and not incompatible with the character of a gentleman: nor would he exclude this exaltation from religion, provided its object be such a Supreme Being as a polite person in good humour feels himself disposed to recognise. But the resemblance between this attitude of mind and that of Plato is scarcely so close as either he or his expositor appears to think.

H. SIDGWICK.

Notes and Intelligence.

Geology.

The Glaciation of Patagonia.—Prof. Agassiz has forwarded to the superintendent of the U. S. Coast Survey a second report of the expedition in the U. S. steamer *Hassler*, of which he has the command. A great number of observations of very great value and interest are detailed in it, among others, a large mass of evidence supporting the theory of the glaciation of Patagonia. In one locality he found a pool containing live marine shells more than 100 feet above the level of the sea, showing a very recent rise in the land. He is inclined, however, to believe that the level terraces which Darwin took for raised sea-beaches are not so in reality, but are the denuded surfaces of the horizontal Tertiary deposits. The only evidences of upheaval met with by Agassiz refer to a period since the deposition of the Tertiaries, and while the shells now living already existed, without pointing to a rise by successive steps. The report is printed in full in the number of *Nature* for 11th July *et seq.*

Fossil Wood from the Lower Eocene of Herne Bay.—*The Geological Magazine*, No. 96, opens with an interesting article by Prof. Dyer on the fossil woods of the Lower Eocene of Herne Bay and the Isle of Thanet. The author describes and figures the microscopic features of the wood of a dicotyledonous tree, which exhibits the peculiar structure known under the name of *Fylose*.

Fossil Footprints in the Carboniferous Series of Canada.—In the same periodical, Mr. Selwyn, the director of the Geological Survey of Canada, notices the occurrence of some fine fossil footprints in a stratum of dark shale belonging to the Carboniferous series of Nova Scotia. These footprints are described and figured by Principal Dawson, who finds the principal footprints to be of two kinds: a large one resembling the form described by him as *Sauropus Sydnensis*, but having a strong claw on the fifth toe of the hind foot, that has left its mark strongly impressed upon the slab; and a smaller impression, sometimes trifid, but occasionally showing the marks of four or five toes. The former, which has been named *Sauropus unguifer*, he thinks may have been produced by *Baphetes planiceps*, the latter perhaps by a species of *Dendrerpeton*.

The Sand-pits, Mud-volcanoes, and Brine-pits of Yarkand.—At the meeting of the Geological Society on the 5th June, Dr. G. Henderson described some remarkable circular pits, occurring chiefly in the valley of the Karakash river. These pits vary in diameter from six to eight feet, and are from two to three feet deep, the distances between being about the same as it is across them. He explains their formation by supposing that water permeates the gravel at the head of the valley, and passes under a stratum of clay, which prevents it regaining the surface; after flowing in very varying quantities for irregular periods, it at length gradually washes away small portions of this clayey band, while the sand above runs through into the cavities thus formed, and produces the pits described. The mud-volcanoes of Tare Dab he considers to arise from the air contained in the water-bearing stratum after a fall of rain or snow becoming churned up with water and mud; it is ejected as a frothy mud, sometimes to a height of three feet. The brine-pits in the Karakash valley he attributes to the excessive rise and fall of the level of that river at various times; the water which fills the pits, unless replenished from time to time, becomes gradually concentrated by evaporation till a strong brine remains.

The Cambrian and Silurian Rocks of Jemtland.—The chief Silurian area in Sweden lies in the neighbourhood of Lake Storsjön, in Jemtland, and covers no less than 1920 geographical square miles. Dr. G. Linnarsson, of the Geological Survey of Sweden, describes this region in the *Geol. Foren. i Stockholm Förhandl.*, vol. 1. p. 34, and notes the striking fact, that the eastern and the western extensions of the Silurian formation of Jemtland exhibit a great lithological and consequently also a palaeontological difference. At places where limestones are prevalent, organic remains abound, and a comparison with strata of other parts of Sweden is consequently easy; but in the western extension of the Silurian rocks clay slates predominate which are utterly bare of fossils, so that it was only by means of a thin seam of limestone which bears Middle Silurian fossils he was able to trace the relationship with the other Cambrian and Silurian rocks. As regards their palaeontological characters, the Jemtland rocks bear a nearer relationship to the Norwegian than to the South Swedish Silurian formations. At several places large masses of metamorphic schist rest on the Silurian beds, but as they have not yet yielded any traces of fossils, their true relative age has not been ascertained.

The Fossils of the Cambrian Rocks of Oeland.—The Cambrian beds of West Gothland consist of sandstone and the so-called alum slate. According to Angelin and Linnarsson, the latter is characterized by two distinct faunas: the lower by *Paradoxides* and *Conocoryphe* species, and the upper chiefly contains *Olenides*. Up to the present time it was believed that in Oeland only the upper zone with *Olenides* was represented, but A. Sjögren has found below this stratum beds

which represent the lower division of the West Gothland alum shale, though differing in lithological character. It is a remarkable fact that this deposit, which has yielded several new species, is more nearly allied to the Bohemian primordial zone than to the rest of the Cambrian rocks of Sweden. (*Geologiska Föreningens i Stockholm Förhandlningar*, vol. i. p. 67.)

Geological Profile of the Central Chain of Scandinavia between Östersund, Sweden, and Levanger, Norway.—The rocks along this line are classified by A. E. Törnebohm according to their relative age in the following manner:—1. Primitive rocks and old granite. 2. Slate of Levanger and Cambrian quartzite. 3. Silurian beds; and 4. For the most part crystalline shales without fossils. These are of uncertain age, but they are probably not older than the Upper Silurian. (*Suveriges Geologiska Undersökning*, Stockholm, 1872, p. 24.)

Coniferous Remains from Solenhofen.—The *Geological Magazine*, No. 95, contains a paper by Prof. Dyer, in continuation of a former one on the same subject, on some remains of Conifers from the lithographic stone of Solenhofen. He describes a new species of *Pinus* (*P. Solenhofensis*), and gives a revision of the genus *Athrotaxis*, with description of two new species (*A. longiramea* and *A. l. latus*), and a notice of a new genus, *Condylites*, probably belonging to the Cupressinae, and including a single new species, *C. squamatus*.

Flint Implements associated with *Elephas primigenius* in the High-terrace Gravels of the Thames Valley.—At the meeting of the Geological Society of London on the 19th June, Col. Lane Fox read a paper on the discovery of several flint implements which he found in association with *Elephas primigenius* and other extinct species of Mammalia. The author called attention to the presence of drift implements in the high terrace, their absence in the mid terrace, and their reappearance in the existing bed of the Thames; and noticed the great rarity or absence of animal remains in the high terrace, their abundance in the mid terrace, and the occurrence of both implements and animal remains at the bottom of the gravel in both terraces.

The Clay Deposits near Campbeltown.—Mr. David Robertson, at a recent meeting of the Geological Society of Glasgow, read a paper on the boulder-clay section near Campbeltown, which, contrary to its usual position in the west of Scotland, here overlies shell-bearing clay. The latter is dark grey in colour, and contrasts strongly with the overlying boulder clay, which is of a full reddish brown. The shell-bearing clay, as exposed in the bed of a little burn or streamlet in Tangy Glen, about six miles from Campbeltown, is seen standing up in the boulder clay like a little knoll, and has doubtless been brought to that form by abrasion. It can be traced for a distance of 60 or 70 yards; and though its exact depth could not be ascertained, as the rock is seen at a short distance on either hand, it probably extends only a few feet below that which is exposed. The boulder clay overlies it to a height of 50 or 60 feet. The latter consists of 50 per cent. of fine mud and 50 per cent. of sand and gravel, while the shell-bearing clay gives 80 per cent. of fine mud and only 20 per cent. of sand and gravel. The fossils are sparsely scattered through this deposit—Molluscs in particular are comparatively rare, the few found being chiefly *Leda pygmaea* with an occasional *Leda pernula* and a few fragments of other species. Ostracoda and Foraminifera are better represented, eighteen species of the former and twenty-six of the latter having been obtained. A remarkable feature of the Ostracoda in this deposit is that they have much in common with those found in the clays on the east coast of Scotland, which have been held to represent more purely Arctic types than those generally found in the west. Amongst these are *Cytherepteron Montrosense*, *C. vespertilio*, *C. Sorbyana*. An upper bed, dipping to the river only, contains the more recent forms common to our raised beaches and present seas. It may be stated that *C. vespertilio* and *C. Sorbyana* are common species in the clays of Norway.

The Structure of the Cordilleras de los Andes.—Dr. Maack, who was in charge of an expedition to explore the Isthmus of Darien in order to ascertain whether the Napipi road would offer advantages for an inter-oceanic canal, has found that the Cordillera de los Andes province of Chocó, New Granada, has features which distinguish it from the rest of the range. Throughout the whole of South America the general strike is from south to north, but in this province it changes to from east to west. The Cordillera of the isthmus consists of several rock systems; no high and wide tableland accompanies it as has been observed in the South and Central American Cordilleras, and it belongs altogether to a far more recent period, being contemporaneous in short with the eruption of basalt and trachyte. (*Boston Daily Advertiser*, 4th Nov. 1871.)

The Geology of the Argentine Republic.—According to Dr. G. A. Maack, the great La Plata plain chiefly consists along its western border of alluvial deposits from one to two feet in thickness, and generally formed of a fine brown or grey silt "Pampa sand," made up for the most part of Diatomaceae, and in the neighbourhood of rivers some still living freshwater shells. This covers the diluvium, the real Pampas formation ("formation pampéenne" of d'Orb. "Pampean mud" of Darwin). More or less red in colour, and attaining a thickness of

10 to 60 feet, it consists of sand and clay and in some parts limestone in so-called "Tosca concretions," and is remarkable for its "Lagunas" or "Salinas," and the gigantic remains of *Megatherium*, *Mylodon*, *Glyptodon*, *Toxodon*, &c. The basis of this Pampas deposit is formed by Tertiary beds, which d'Orbigny divided into a *système guarani* and *système patagonien*. To the former may belong the lignite beds of Rio grande do Sul, in Brazil. The latter group is best developed in the neighbourhood of Paraná, and near Viveros, in Uruguay; its chief fossils are *Venus Münsteri* and *Ostrea patagonica*; and the formation may be ranked beside the Swiss molasse. Tertiary beds are found at a depth of 280 feet at Buenos Ayres, whence they seem to extend right away to the base of the Cordilleras. Other sedimentary rocks are unknown in the Pampas, though the older Plutonic rocks are met with at isolated spots. (*Proc. Boston Nat. Hist. Soc.* vol. xiii. 417.)

Zoology.

We have received three parts (Nos. 4-6) of the *Illustrated Catalogue of the Museum of Comparative Zoology at Harvard College*:—No. 4 is intituled "Deep-Sea Corals," by L. F. de Pourtales (pp. 93, with eight plates). The corals described in this paper were collected in the years 1867-9, during the expeditions made by the United States Coast Survey for the exploration of the Gulf Stream, and more particularly that part of its course known as the Straits of Florida. The greatest depth at which the dredge appears to have been used is 853 fathoms, between Key West and Havana. The families having apparently the greatest range in depth are the *Oculinidae*, *Stylasteridae*, and *Milleporidae*, and about fifteen species are considered to be characteristic of the rocky bottom at greater depths than 100 fathoms. The explorers found, moreover, that the Gulf Stream, as far, that is to say, as they examined it, extends to the bottom, and is not underlaid by a cold arctic current running in an opposite direction, as has sometimes been assumed to account for the low temperature at the bottom. Mr. H. Mitchell, assistant on the United States Coast Survey, proved experimentally that the Gulf Stream has a nearly uniform velocity in those straits, and a constant course for a depth of 600 fathoms, although its temperature varies 40° Fahrenheit in this depth.—No. 5 is intituled "The Immature State of the *Odonata* (Part I.: Sub-Family *Gomphina*)," by L. Cabot (pp. 17, with three plates). The larvae of seventeen species are described, but only four are identified and placed beyond any doubt; all the others are determined by exclusion or supposition, and some of them more or less doubtful.—No. 6 is a "Supplement to the *Ophiuridae* and *Astrophytidae*," by Th. Lyman (pp. 18, with two plates), in which some of the Ophiurians procured by deep-sea dredging in the Straits of Florida, as well as a few other species from shallow water, are described.

Syrraptes paradoxus in Scotland.—This remarkable Asiatic bird, a sudden irruption of which occurred in Germany, Holland, and more particularly in Great Britain during 1863, and which is commonly known by the name of Pallas's Sand-grouse, has made its appearance again this year, four of them having been seen on the 25th and 29th of last month near Girvan, in the west of Scotland. It is at present uncertain whether these birds are fresh arrivals or descendants of the individuals which immigrated in a previous year.

Two New Sponges from the Philippine Islands.—The British Museum has just received two new genera of Sponges that were discovered by Dr. A. Bernhard Meyer at Cebu, the island in the neighbourhood of which the beautiful *Euplectella* occurs. One of these sponges, named by Dr. Gray *Meyerina claviformis*, is, indeed, allied to, but still more beautiful than, *Euplectella*; it is 18 inches long, in shape like a cucumber, is slightly bent upon itself, and, whether regarded in its several parts or its entirety, must unquestionably be ranked as the most exquisite of sponges. The second, named by Dr. Gray *Crateromorpha Meyeri*, is of very different form, being goblet-shaped, and consisting of a globular, hollow body supported by a contracted stem. The globular part is $\frac{3}{4}$ inches wide, and the stem $\frac{3}{4}$ inches long. Both these sponges are marine, and grow erect in sandy mud. (*Ann. and Mag. Nat. Hist.* July and August.)

The First Dredge.—To Otto Friedrich Müller belongs the honour of having invented the dredge. The Zoological Museum at Cambridge, U.S., possesses in its library the copy of Müller's *Zoologia Danica* used by Tilesius during Krusenstern's voyage round the world in the beginning of this century. Tilesius, among many interesting remarks written on the fly-leaf, mentions the dredge invented and used by Müller, and represented in the vignette of the title-page. He purchased it on his passage to Copenhagen in 1803 of Vahl, Müller's collaborateur, and used it occasionally during the voyage, though, as he admits, not often, as he required the assistance of several sailors to work it, the rope alone weighing eighty pounds. On his return, the dredge was deposited in the collection of the Academy of Sciences of St. Petersbourg.

The Colours of Insects.—Under the heading of "Mimicry in the Colours of Insects," Dr. H. Hagen contributes a very interesting paper

to the July number of the *American Naturalist*. He states that the colours of insects are of three distinct kinds, viz. colours produced by interference of light, colours of the epidermis, and colours of the hypodermis. Colours due to interference may be produced in two different ways: either by thin superposed lamellae, as in the wings of Diptera and Neuroptera, or by many very fine lines or striae in very near juxtaposition, as in *Apatura* and other colour-changing insects; these colours are only optical phenomena, and differ in this respect from both of the other kinds. The epidermal colours belong to the pigment deposited in the cells of the chitinized external skin or epidermis. They are mostly metallic blue, green, bronze, golden, silver, black, brown, and perhaps more rarely red. They are very easily recognised, being persistent and never obliterated or changed after death. The hypodermal colours are situated in the non-chitinized and soft layer called the hypodermis by Weismann. They are mostly brighter and lighter, light blue or green, yellow, milk-white, orange, and all the shades between. The hypodermal colours in the body of the insects fade or change, or are obliterated after death. The hypodermal colours are very often different in males and females of the same species; the epidermal colours rarely differ. The hypodermal colours may change or be altered in some way in a male or female during its lifetime by sexual or other influences; the epidermal colours never change; the so-called "mimetic" colours are probably hypodermal. The hypodermal colours appear to be due to a kind of photographic action; the epidermal to a chemical process of combustion or oxidation.

Distribution of Land Molluscs in the Sandwich Islands.—Mr. John T. Gulick contributes to *Nature* for July 18 some new and curious particulars respecting the distribution of a group of *Helicidae* known as the *Achatinellinae* in the different islands of the Sandwich archipelago. The group is characterized by a spiral twist of the columella, generally so strongly developed that the columella seems to be armed with a lamellated tooth revolving within the shell, and is peculiar to the Sandwich Islands. It consists of several genera, most of which are confined to a single island. A remarkable development is found on Oahu, an island sixty miles long, with an average breadth of about fifteen miles, on which are found no fewer than about 185 *Achatinellinae*, all, with only one or two exceptions, peculiar to the island. Nearly all the species are confined to the forest regions skirting two ranges of mountains, about forty miles long, by five or six wide; and even here no one of the species is distributed over even one-half of this small mountain range, being mostly restricted to areas of from one to five miles in length. Each mountain valley has its own varieties, and in many cases its own species; and the same remarkably restricted distribution of species is found in the other islands of the group. Nearly all the species of one genus found on one mountain range are connected by varieties presenting very minute gradations of form and colour. Species of the same genus on different islands are not so completely connected by intermediate forms. The degree of difference between the several species of the same group is in proportion to their separation in space. Nearly allied species, occupying neighbouring localities, pass from one to the other by all the intermediate gradations of form and colour, while those whose homes are separated by a distance of eight or ten miles cannot be connected by minute gradations without bringing in some of the forms occupying the intermediate territory. Mr. Gulick is however unable to account for these differences by natural selection, survival of the fittest, or any other theory. The conditions under which the allied species live are so completely similar that it does not appear what ground there can be for difference in the characters best fitting the possessors for survival in the different valleys in which they are found. The ground species are mostly dextral, while the arboreal species are chiefly sinistral, though this rule is not without exception.

Physics.

Earthlight on the Moon.—Prof. Shaler, of Harvard, who has devoted considerable attention to the appearance of the new moon when illuminated by the light of the sun-lit earth, has communicated his observations to the *Philos. Magazine* for August. With the 15-inch Mertz of the university observatory it is possible to see all the principal features of the topography of the dark region illuminated only with this earthshine. The eye is unable to recognise the craters by light and shade, the light being too feeble, besides being too vertical; the relief is due to the difference in the light-reflecting power of the various features of the topography. Whatever becomes very brilliant under the vertical illumination of the full moon shines out with a singular distinctness when lit by our earth's light. When the moon is not over twenty-four hours old, she is at her best for observation. The author was able to recognise nearly all the craters of the darkened part that are over fifteen miles in diameter, and probably one-half the bands which show with a power of 100 when the moon is full.

The Atmospheres of the Fixed Stars.—The first annual report of the observatory of Bothkamp, edited by H. C. Vogel, the director,

contains very important results, which extend our knowledge of the branch of astronomical science that Miller and Huggins may be said to have founded. The following red stars were examined: α Orionis, α Herculis, β Persei, and ϵ Leonis Minoris, and gave spectra that agree perfectly in exhibiting a series of broad dull absorption bands having sharply defined boundaries on the side next the violet. In the spectrum of α Orionis (*Betelgeux*) many lines were measured and compared with those in Ångström's atlas of the solar spectrum, and the presence of sodium, calcium, magnesium, iron, and bismuth, determined with a high degree of probability. The presence of hydrogen is uncertain, for in that portion of the stellar spectrum which should be occupied by $H\beta$, the second hydrogen line, a dim band only is observed, and $H\alpha$ and $H\gamma$ are altogether absent. The lines of α Herculis conclusively indicate the presence of sodium, magnesium, and iron, and probably that of calcium and tin. The spectrum of another red star, α Bootis (*Arcturus*), differs greatly from those of the four above mentioned. It contains, in the place of bands, several sharp lines that could be measured with great exactness, and resembles most nearly the solar spectrum, but is distinguished from it by certain lines between D and b, not present in the sun, and by a dearth of lines in the red and blue. $H\alpha$ and $H\beta$ were detected with difficulty, and $H\gamma$ not at all, only a dull dark band being seen near G. A comparison with the lines of typical spectra was more easily made than in the case of α Orionis, and the presence of hydrogen, sodium, calcium, magnesium, iron, and chromium determined with certainty, and that of barium, manganese, and silver rendered highly probable. Though in the brilliant spectrum of Sirius the hydrogen lines are astonishingly prominent, the groups of lines are otherwise so weak that it is only possible to recognise with certainty the two sodium lines D and the magnesium line b. The spectrum of the variable star β Lyrae is peculiar in having a continuous ground on which bright instead of dark lines are seen. Of three more striking than the rest, one near the D line is the most intense, a second is on the boundary of the blue, and the third a little short of G. The positions of the three were determined with great accuracy, and their values in wave-lengths are: 587.5, 485.9, and 434, the limit of error being within 0.2 millionths of 1 mm. The first line is rather more refrangible than D, and agrees with the one, usually termed D_s, first noticed in the protuberances; the two others are hydrogen lines. Besides these, other bright lines were seen, one lying between D and C, the other probably being b of the solar spectrum, and corresponding with magnesium. (*Der Naturforscher*, No. 27.)

The Meteoric Shower of 30th April—1st May.—This meteor stream, the apparent position of whose radiant point is found by Schiaparelli to be in the Northern Crown, R.A. 237°, N.P.D. 55°, and which has also been recognised by R. P. Greg, was, according to D. Kirkwood (*Amer. Jour. Science*, July, 52), a more conspicuous object in earlier times. Meteoric displays are recorded by Quetelet to have occurred on this day, A.D. 927 and A.D. 934, and it is considered by the author that this stream of meteors may be connected in its origin with the comet which passed its perihelion about the 29th April, B.C. 136.

The Altitudes of Aurorae.—A paper on this subject in *Pogg. Ann.* No. 5, contains the results of observations of the aurora of the 4th February, made by Galle and Reimann, at the observatory at Breslau. Fourteen determinations made independently by these observers indicate a mean height of fifty-five geographical miles for the auroral rays. It appears probable that light is developed at even a less altitude than this, at forty miles, or what is practically the limit of the atmosphere, where, according to the observations of Liais, in Brazil, the last traces of reflected sunlight are to be detected, and the ignition of meteors is assumed to occur. The magnitude of the rays was not determined, but they are believed by these observers to have an average length of forty miles.

The Electrical Condition of Gas Flames.—Prof. Trowbridge, of Harvard, publishes a paper on this subject in the *Amer. Jour. Science* for July, page 5. He finds—1. That the flame of a Bunsen burner is negative while positive electricity accumulates on the burner itself, if it be a good conductor; when made of non-conducting material, no charge is noticed at the top of the flame. 2. The stratum of air in contact with the outer cone of flame is slightly charged with positive electricity, the partly consumed gas of the inner cone being neutral. 3. The presence of flames tends to change the nature of the atmospheric electricity at any given place, reducing a positive tension to a feebly negative one. As the electricity of air during cloudy and rainy weather is generally negative, or at the most feebly positive, the author considers that his observations in some degree warrant the popular idea that great fires are followed by a change in the atmosphere inducing rain.

The *Bulletin de l'Acad. royale des Sciences de Belgique*, No. 3, has a paper by J. C. Houzeau on a ready method of calculating lunar phases. It is especially intended for the use of students of history, and, with the help of the four tables appended to it, enables them to perform calculations of this kind with ease.

New Publications.

- ABBOTT, C. A. *The Stone Age in New Jersey.* Salem (Mass.) : Peabody Academy of Science.
- ANNUAL RECORD of Science and Industry for 1871. Ed. by S. F. Baird. New York : Harper and Brothers.
- ARBEITEN aus dem zoologisch-zootomischen Institut in Würzburg. Herausg von C. Semper. I. Heft. Würzburg : Stahel.
- BASTIAN, H. C. *The Beginnings of Life.* Two vols. Macmillan.
- BONNISSENT, M. *Essai géologique sur le Département de la Manche.* Paris : Savy.
- BREFELD, O. *Botanische Untersuchungen über Schimmelpilze.* I. Heft. Leipzig : Felix.
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Philology.

The Nominal Suffix *ya* in Indo-Germanic. [Ist in der indo-germanischen Grundsprache ein nominales Suffix *ia* oder statt dessen *ya* anzusetzen?] Von Theodor Benfey.]

The Origin and Forms of the Indo-Germanic Optative. [Über die Entstehung und die Formen des indogermanischen Optativ (Potential), so wie über das Futurum auf sanskritisch *syāmi* u. s. w. Von Theodor Benfey.] (Publications of Göttingen Scientific Society.) Göttingen : Dietrich.

PROFESSOR BENFEY has reprinted these two papers from the *Transactions of the Göttingen Gesellschaft der Wissenschaften.* Their titles are not ambitious : but the importance, at least of the second paper, for comparative grammarians is very considerable. In both of them is clearly seen the writer's acute and many-sided intellect : whether we agree with them or not, we learn from them.

The first (which in one way is introductory to the second) aims at proving that a nominal suffix which has played an important part in Indo-European languages had for its original form *ia*, not *ya*, as all philologists had hitherto believed : in other words, that it was a dissyllable, not a monosyllable—a circumstance which of itself raises a presumption against the new view, when we remember the undoubted antiquity of the suffix. The new evidence is the occurrence in the Vedas (clearly shown by Professor Benfey) of both the monosyllabic and dissyllabic form of the suffix, whereas in classical Sanskrit, as is well known, the former alone occurs. Which form is more frequent in Vedic writings is not certain ; nor, indeed, is it material : the dissyllabic form is found there abundantly ; and occurs also in Pāli and the Prākrits. Which form was the older ? The professor argues from the general improbability of so extensive a diaeresis of *ya* into *ia*, in default of parallel cases, and from the special improbability of so exceptional a change in Sanskrit, where the general tendency is to avoid hiatus : from the regular process of the formation of words, to wit, the meeting of open vowels in the amalgamation of the component parts ; which vowels are at first pronounced distinctly, afterwards phonetic change occurs in order to avoid hiatus : from some indications given by the Sanskrit

accentuation ; and, lastly, from the fact that the suffix undoubtedly appears as *io* in Greek and *io* in Latin. From these arguments, but more especially from this agreement of the three languages, whose records are much the oldest which we possess, he concludes that the original form of the suffix was *ia*, which afterwards, in the Asiatic and North European languages, passed into *ya*.

Professor Benfey's argument undoubtedly disturbs the quiet possession of the received theory. Yet there is something to be said for that too. The agreement of the three languages—Sanskrit, Greek, and Latin—would be much more striking if the two last had possessed the *y*-sound : the few cases where it seems to occur in Latin, e. g. *Pompeius*, are scarcely to be regarded. Greek and Latin could not change from *i* to *y* : the other languages, which had both sounds, could change as easily from the one as from the other. The solution, therefore, of the question in favour of *ya* rests not merely (as Professor Benfey says) on a numerical preponderance in its favour, which would certainly not be conclusive : the nature of the evidence on the two sides is different : the evidence which can be drawn from Greek and Latin is much less conclusive. Further, it seems to me hard to separate the history of the nominal suffix *ya* from the verbal suffixes—formative and inflectional—of the same form : nor, I think, does Professor Benfey altogether wish to do so. But the manifold forms which the formative *ya* takes in Greek become in this way very unintelligible. Once derive them from a sound which the Greeks could not pronounce, and therefore endeavoured in many different ways to avoid, and all is plain. But why should there be such variety from original *ia*, a combination to which the Greeks had no objection ? Lastly, the occurrence of *ia* beside *ya* in Vedic undoubtedly is easiest to understand on the professor's hypothesis—that *ia* was original, but began to pass into *ya* in the age of the Vedic hymns (both forms then existing), and was altogether lost in the classic period. But the very theory by which he explains the curious occurrence of both forms in the same literature may help us to understand how *ya* could pass for a time and to some extent into *ia*, and yet be fully re-established again. The Vedic language, Professor Benfey says, is an artificial language—derived, indeed, but yet quite distinct, from the popular speech. I quite agree : and is it not just in such a language as this that an artificial diaeresis might be expected ?—a diaeresis which never established itself in the popular speech, which retained the original sound *ya*. I do not think that we should expect Vedic peculiarities of the sort to pass into the popular Sanskrit. Professor Max Müller's remarks on the license of pronunciation allowed in the Vedic hymns (*Rig-Veda-Sanhita*, vol. i. preface, p. lxxvi) seem to me pertinent here.

The second paper before us is an enquiry into the origin of the optative. In this enquiry is involved a larger question—as the professor points out—whether the principle originally laid down by Bopp, that such formations were compounded out of pre-existing words, not roots, or at all events out of a root and a word, is to be still maintained, as against the newer theory, that the changes of meaning in the moods were expressed by the insertion of probably pronominal roots. Bopp held that the optative-suffix was *ya*, formed from a root *i*, “to wish,” with the suffix *a* : from this primary sense of wishing he thought that the other powers of the optative could be deduced. Professor Benfey adopts this view, with modifications designed to meet one or two difficulties in it. The first difficulty is the assumption by Bopp of the special Sanskrit phonetic law (by which *i* + *a* became *ya*) in order to get the ground-form applicable to all Indo-European languages. To this difficulty, which is

considerable though not fatal, because *i* might have passed into *y* in Indo-European (which possessed both sounds) and then been reinstated in Greek and Latin, Professor Benfey adds an objection to the insertion of *ya* before the personal endings. I do not understand Bopp as necessarily maintaining such an insertion: it is contrary to his principle above stated: but undoubtedly Benfey's objection to the insertion of such verbal roots is supported by all analogy. His own view is that the optative forms (which are three in Sanskrit and more in Greek) do not spring from one common origin—but from different tenses of a verb *i*, "to wish," which he agrees with Bopp in looking on as the radical idea of the mood. These tenses are the present and imperfect—indicative and conjunctive—both of the simple verb *i* and of the same verb as a base with a suffix *a*. From the imperfect of the simple verb *i-am* (*i-m*), *i-s*, *i-t*, &c. we get the Sanskrit forms of the first conjugation (*bhareyam*, *bhares*, &c.), the Greek ordinary forms (except the first person *φέρομι* in common use, but the archaic first person) *φέροντ*, *φέροντ*, &c., and the Latin futures *feres* (for *fera-is*), &c. The other usual forms he gets from the imperfect conjunctive of the base *ia*, i. e. *iām*, *iās*, &c.—which give the Sanskrit forms of the second conjugation *-yām*, *-yās*, &c., the Greek *-ην*, *-ησ*, &c., the old Latin *-iēm*, *-iēs*, &c. (e. g. in *sīem*), and the Gothic *jau*, *eis*, &c. The middle voice of the Sanskrit is the imperfect indicative middle of the simple verb, *i-ma*, *i-sa*, &c.—but, it must be confessed, with some strange changes of termination. Other Greek forms are ingeniously fitted into their respective holes: *φέρομι* is the indicative present of the simple verb—meaning simply, "I wish to bear": forms like *τύψεια*, *τύψειας*, &c. are given to the imperfect of the base, *iām*, *iās*, &c.: the Homeric conjunctives *θείης*, *μεθείη*, &c. are present conjunctives of the base; *δαιμών* is the base present either conjunctive or indicative; *θείομεν* is the indicative either present or imperfect: lastly, the indicative present, *i-ā-mi*, *i-ā-si*, &c., when attached to the root *as* (*es*) "to be," gives the future; in Sanskrit *-syāmi*, in Greek *-σω* through *σω*, and in Latin *ero* for *es-iō*.

All this is extremely ingenious, and holds together well. There is nothing improbable in this application of many forms to denote one category: on the contrary, it is in accordance with all we know of the principles of language. I wish to point out some difficulties in the theory; but I fully recognise that Professor Benfey has made out a very fair case with the evidence he has to deal with: he candidly lays claim to no more.

In the first place, it seems quite impossible to prove that the vowel *i* was ever long in the optative of either Greek or Latin. In *sīem* it was short, and the Greek admits of no proof either way. Professor Benfey seems to recognise the difficulty at p. 9, where he speaks of *oī* becoming *o* in Greek, and gives *κοίτη* from *ki* as an instance. But there is no proof that the root *ki* was long in Greek: I believe it to have been short in Graeco-Italian, as shown by Latin *quies*, &c. But it is essential to any establishment of the professor's theory that it should be proved to be long, or at least to show some traces of its having been so: for otherwise the sense "to wish" falls to the ground. Indeed there is but unsatisfactory proof for this root. Professor Benfey regards it as = *i + i*, the intensive of *i*, "to go," in the sense of applying to a person, requesting, wishing: then from wishing, he devises a transition through possibility to potentiality, in order to account for all the meanings of the verb. Now it does not seem easy to establish the sense of wishing for *i* even in Vedic: in common Sanskrit the sense does not occur: and Professor Benfey himself has some excellent remarks (p. 21) on the fact that in a living language a word never really has too distinct senses at the same time: it has

one sense, though under special circumstances it may be applied to express another: and consequently it is improbable that *i* should really have had the special sense of wishing, here assumed to be so old, when it actually means "to request" in Vedic. In Greek and Latin we find no *i*; we have *t*, "to go": the Greek *lórtys* and *μέρος* may point to a secondary root *is* with the desired sense: the nearest form is the Homeric *ἴέμενος*, which exactly corresponds to the Vedic *īyamāna*; but too much dependence must not be placed on the length of the vowel here: it is short in *Ιέρα* (*Od.* xxii. 304); and cases like *ἄθαντος*, *Ἄποντοςθαι*, &c., where a short vowel is artificially lengthened when followed by two or three others, are too common in Homer for us to feel certain about this one.

In the next place, does the syntax of the different languages, in which the mood occurs, countenance the view that "wish" (or "power") was the primary sense of the mood? In Latin the mood was absorbed into the subjunctive; but this very absorption points to a similarity of function and origin. In Sanskrit, it seems in the main conditional: but here we must wait for fuller information on the most important subject of Vedic syntax from Professor Benfey himself. When, however, in classical Sanskrit we find (e. g. *Nala*, i. 30) *vīśiṣṭāyā vīśiṣṭena sangamo guṇavān bhavet*, we seem to have a perfectly parallel usage to the Homeric (e. g. *Od.* iii. 231) *ρέπα θεός γ' έθέλων καὶ τηλόθεν ἄνδρα σώσων*: that is to say, a direct statement differing from the indicative only by the introduction of more or less uncertainty; the statement of a conception, not of a fact. Now this usage is frequent in Homer; in Attic Greek it is hardly traceable: while the sense of wishing, and of potentiality (with *āv* or *κέν*), are comparatively rare in Homeric Greek, but fully established in Attic. This surely does not point to wishing as the primary sense of the mood. Again, it is well known that the subjunctive and optative are used in Homer to express the same kind of idea, only with different degrees of certainty. In the line, *ἄλλον καὶ ἔχθαιρην βροτῶν, ἄλλον καὶ φλοτήν* (*Od.* iv. 692), the optative is no whit more potential than the subjunctive. So far as sense goes, I can see no reason for treating the optative as a different kind of formation from the subjunctive. I do not know whether Professor Benfey would now form that mood on the same principle as his optative: but in his excellent *Kurze Sanskrit-Grammatik*, while confessing doubt on the matter, he seems to acquiesce in the usual explanation of the *a* of the subjunctive, namely, that it is an inserted element adding uncertainty to the verb. Now if this explanation is the best that can be given for the subjunctive suffix *a*, why should it not be tenable for the optative suffix *ya*? It seems to me that the received view is internally probable, by which both *a* and *ya* are regarded as demonstrative roots: I hold to the opinion that the relative sense of *ya* is later. In this explanation we have the analogy of the augment to help us: only the same element is attached to a different portion of the word, naturally to avoid confusion. I take the steps to be these: *φέρε(τ)i* = "he bears," *φέρη(τ)i* (with the inserted *a*) = "he bears there" = "he bears not here but elsewhere" = "his bearing is present to the mind only" = "he may be conceived of as bearing." The same explanation holds for the optative, probably a later formation and possibly to denote greater remoteness. Hence the subjunctive, as giving the nearer event, can be used to express greater probability: also as dealing with an object near at hand it gets its well-known usages to express doubt and questioning with reference to immediate action. The optative, on the other hand, as formed by the stronger suffix, can express a greater degree of uncertainty, a more remote consequence, and a wish, realised as a mere conception.

It is, no doubt, a strong point against this theory that it gives no explanation of the almost universal change of *ya* to *yā* in this suffix. The long *a* before *m* in the Sanskrit first person singular and plural may be explained by the nature of the following sound—compare the extraordinarily disproportionate number of lengthenings before *μ* in Homer—and the dual *-āva* may have followed on analogy. But no physiological reason, so far as I know, can be assigned for lengthening a vowel before *s* or *t*. This difficulty then must be admitted.

JOHN PEILE.

China's Place in Philology. An Attempt to show that the Languages of Europe and Asia have a Common Origin. By Joseph Edkins. Trübner, 1871.

THE first part of the problem alluded to in this title, China's place in philology, is certainly one of the most interesting and important of linguistic questions; and no one can be better qualified to answer it than Mr. Edkins, whose knowledge of Chinese and its dialects is at once extensive and accurate. But instead of restricting himself to this first part of the subject and investigating the phonetic and grammatical forms of Chinese in connection with other monosyllabic languages (Annamese, Siamese, Burmese, and Thibetan), the author descends from the scientific to the theological level by attempting to prove that the languages of Asia and Europe proceed from a common origin. Even if this could be done—and in the attempt the principal question is made to appear of secondary importance—we are at a loss to imagine what the author supposes himself to have gained thereby; for his object, as his theological attitude plainly shows, is to prove the unity of *all* races, and for this it would have been necessary to adduce the languages of Africa and the New World, which he entirely omits to do. Apart from this error, into which a philologist of the nineteenth century ought scarcely to have fallen, the method followed in his work is not exactly on a level with the present standard of scientific enquiry. Mr. Edkins fares no better than Xylander in his well-known book, *Das Sprachgeschlecht der Titanen*, when he allows himself to compare Chinese and Mongolian words with Greek and Sanskrit ones, and Thibetan with Hebrew, without considering the possibility of the origin suggested in each individual case. Thus before investigating the formal or phonetic elements with sufficient accuracy, he lays hold on certain morphological or syntactical coincidences, which, as is well known, can only be relied upon when the first two points have been already cleared up.

The author's observations in chap. iv. on the origin of language were evidently written in ignorance of the labours of Steinthal and L. Geiger, a pardonable circumstance considering his residence at Pekin; but some of the views which he imparts are such as even a theologian—in Darwin's native land—ought not to introduce into a work of scientific pretensions.

We fail to see how the enquiry into China's place in philology is furthered by the author's declaring the Chinese to be "Hamites who migrated eastwards before the building of the tower of Babel," for certainly no philologist would take such a statement upon faith, and to those who would, the whole question is a matter of indifference. The author is also in error in maintaining, in the beginning of the seventh chapter, that the Himalayan languages are more modern than Chinese; on the contrary, according to the latest researches, they as well as the other monosyllabic languages belong to a much older phase of phonetic development than Chinese.

In spite of these defects, to which must be added the numerous inaccuracies in transcription of Indo-Germanic and

Semitic words, the book contains many valuable remarks upon the languages of Upper India; and especially the greater part of what the author communicates from the rich stores of his sinological learning is at once new and of the highest interest for philologists. FRIEDRICH MÜLLER.

A Grammar of the Urdu or Hindustani Language.

By John Dowson. Trübner.

THIS grammar belongs to the best sort of those intended for practical use and convenience. It gives all the grammatical materials and the rules of syntax with completeness and brevity, which should make it fully answer the purpose for which it is intended.

There is however one essential defect which it shares with all the Urdu grammars that have hitherto appeared, that of ignoring the importance of comparative philology. When it is found that languages of older formation such as Latin, Greek, or Gothic, cannot be thoroughly understood without applying the comparative method and assimilating the results of modern philology, the same must be even more certainly the case with a quite modern language such as Urdu, which is more nearly parallel to the Romance dialects. Just as it is impossible to obtain a really scientific insight into any of the Romance languages without reference to Latin, so it is impossible to comprehend any form in Urdu, which belongs to the linguistic treasury of India, without recurring to Pali, Prakrit, and Sanskrit. And that this is not a matter of indifference even to the practical student appears from the rule discussed on p. 113, "The Agent Case," which, as the author himself observes in the preface (xiii), can only be understood by the help of Sanskrit.

The scientific study of the languages of modern India is especially incumbent on English scholars; no one in Europe has so close a concern with these languages, which possess a rich popular literature, and it may even be hoped that Sanskrit literature will be enriched and supplemented by their study.

As much unexpected light was thrown by the Romance languages upon the history of Latin (cf. Schuchardt's excellent work), certainly a profounder study of the new Indian dialects would explain many obscurities in Sanskrit. The Sanskrit lexicon, in particular, which at present, like the Arabian, contains an amalgamation of the most discordant elements, might be thoroughly sifted, and dialectic differences certainly would come to light as the popular languages were investigated. But to attain this result, the matter must be viewed from different sides, and in the first place a zeal for the scientific study of the popular dialects must be awakened.

FRIEDRICH MÜLLER.

M. SHAPIRA.

TO THE EDITOR OF THE ACADEMY.

SIR,—In the *Athenaeum* of to-day there is a letter, dated Jerusalem, July 24, 1872, and signed "H. J.," which gives an account of "the excavations in search of antiquities in Moab, which are being carried on under the auspices of M. Shapira," and which "have proved surprisingly successful." Allow me to repeat the warning which I gave in a recent number of the *Academy*. There was shown to me some weeks ago, at the British Museum, a drawing of the top of a pillar, sent home by M. Shapira. On it were figures of animals and an inscription, partly in Phoenician and partly in Nabathean characters. The authorities at the Museum seemed to have little doubt that the whole thing was a forgery.

That the Count de Vogüé should have secured a fine Phoenician inscription of fifteen lines, dug up at Beirut, is a matter of congratulation.

W. WRIGHT.

Cambridge, August 10, 1872.

Intelligence.

The experiment which is being tried at Zürich, of admitting women to the ordinary academical course, is attracting considerable attention in France and Germany as well as in England, especially in view of the sudden increase (from seventeen to fifty-one) in the number of such students which has taken place this year. A very well informed writer in the *Allgemeine Zeitung* (July 23, 25, 26) represents the professors as entirely satisfied with the results at first obtained; but it appears that some of the latest comers (chiefly Russians) are imperfectly prepared for the university course, and to guard against any danger of lowering the academical standard, it is proposed to introduce a matriculation examination for all the students alike, and this plan is favoured by the ladies themselves, who are of course anxious that the degree of the only university open to them should not lose its relative or its positive value. Forty-four out of the fifty-one students are inscribed in the faculty of medicine; and a pamphlet by the physiologist Bischoff, who entertains a strong *a priori* objection to the study of medicine by women, has called forth an answer by his colleague, Prof. Biermer, who has had in all twenty women in his lectures, and speaks highly of the accuracy and penetration of the best amongst them. He adds: "Gerade in der Mikroskopie, einer wichtigen Seite der modernen Medicin, hat meiner Ueberzeugung nach das Weib eine Zukunft." As to the anticipated inconveniences of lecturing on anatomy, &c. before mixed classes, the professors are unanimous that none have arisen. The conduct of the young men has been irreproachable, and the serious zeal of the ladies has acted as a stimulus to the other students; the only difference made by their presence in the lectures is that the slightest facetiousness of tone has become impossible, and this sacrifice, if it can be so called, the professors make without reluctance. The experience of Zürich is important because Lord Gifford's interlocutor in the action brought by the lady students at Edinburgh against the senate and chancellor of that university may be considered to decide the case practically in favour of the former. The French universities, it is noticeable, show much less reluctance than those of Germany to the admission of female students.

M. Ganneau, whose name is so well known in connection with "the Moabite stone," has published in the *Revue archéologique* a list of Hebrew, Greek, and Latin inscriptions discovered by him in Palestine. Twelve of them are described as Hebrew inscriptions, including—No. 1, the Moabite stone; Nos. 2 and 3, inscriptions in Phoenician characters found at Silván, and presented to the British Museum; Nos. 11 and 12, Greek inscriptions, with single word in archaic Hebrew. There is also one in each of the following characters: hieroglyphic (found at Gaza), cuneiform (found at Salt), ancient Aramaic, Phoenician, Nabaean, Estrangelo, Pehlevi; also eight Latin and fifty-six Greek inscriptions. A large number of engraved stones, graffiti, texts of the Crusades, cufic and other inscriptions (not all found in Palestine) are not included in this catalogue. M. Ganneau is now in Paris.

With the publication of the twenty-first volume of *Kuhn's Zeitschrift*, a new series commences, under the same direction as the old. An index to the last ten volumes is in the press, and will appear in the course of the year.

Messrs. Teubner announce *Untersuchungen über das System Plato's*, by Dr. David Peipers; an *Anthologia Latina Epigraphica*, by Bücheler; an edition of Demosthenes' *de Corona*, by J. H. Lipsius; *Polemonis Declamationes*, by Hinck; and *Porphyrius Commentarii in Horatium*, by W. Meyer.

In *Fraser's Magazine* for August, "Pronunciation of Latin," by D. F., supports the hard pronunciation of *c* and *g* by Celtic analogies, which are also used to explain the transition to the present Italian pronunciation, which is recommended for practical adoption.

Contents of the Journals.

Journal Asiatique, No. 70.—Essay on the two principal Aramean dialects, by M. l'Abbé Martin. [The introduction explains the local distinction between the two dialects, which corresponds pretty nearly to the religious division between Nestorians on the one hand, and Jacobites, Maronites, and Melchites on the other. M. Martin then proceeds, on the basis of Bar-Bahlul, Jacob of Edessa, Bar-Hebraeus, &c., to examine, 1. phonetic questions, and 2. different parts of grammar; concluding with some remarks on Syriac lexicography. He expresses an unfavourable opinion as to the results to be obtained for the lexicon from publishing the works of Bar-Aly and Bar-Bahlul. Passages from manuscript authorities are given at the end of the number.]—Intelligence, and notice of the Appendix to Perny's *Chinese Dictionary*.

The Pandit, Vol. vii. No. 73 (June).—The *Sabdachintāmani* (or fourth book of the *Tattva-chintāmani*, a celebrated work on *Nyāya* philosophy), with Ruchidatta Miśra's comment. [Continued.]—The *Brahma-mīmāṃsā*, or *Vedānta* aphorisms, with Kanṭhaśivāchārya's

comment. [Continued from the 19th aphorism of the 1st pāda of adhyāya I. to the end of the 2nd pāda.]—A *r̄śīmūl* (*uparamhāra*), by Vāmanāchārya, of the drama *Viddhasālabhanjikā* of Rājasekhara.—The first portion of the *Karpāramanjarī*, a *Saṭṭaka*, or dramatic composition in Prākrit dialect, by Rājasekhara. Edited, with a Sanskrit translation, by Vāmanāchārya.—The *Vidvan-mano-ranjīti*, or "Rejoicer of the Mind of the Learned," a commentary on Sadānanda's *Vedāntasāra*, by Rāmatīrtha. Edited, with an English translation, by A. E. G. and G. D. [Continued.]—Catalogue of Benares Sanskrit MSS. [Continued. MSS. 5–10 of Nyāya and Vaiśeṣika works.]

Rheinisches Museum, vol. xxvii. pt. 3.—A. Holm : The Discoveries in the Great Temple at Selinus in the Spring of 1871. [With facsimile of an Inscription.]—K. Dilthey : On the Greek Hymns published by E. Miller. [Discusses them in connection with the magic-papyri edited by Parthey, with remarks on the earlier literature of magic, and some emendations on the text.]—L. Ziegler : On the Text of the Scholiasta Bobiensis on Cicero's Orations. [A number of critical notes, the result of an accurate re-examination of the palimpsest.]—J. Gildemeister and F. Bücheler : Themistios *περὶ ἀρέτης*. [A German translation of the Syriac version by which alone this valuable relic of antiquity has survived.]—H. Gelzer : Inscriptions in Asia Minor.—W. Schmitz : On the Tironian Notes.—Fr. Rühl : Corporare.—L. Müller : *In re Simonides*. [Prof. L. M., writing from St. Petersburg, informs us that the Russian officials know nothing of Simonides or his whereabouts.]—L. Müller : On Tacitus and Suetonius. [On a supposed surviving fragment of the Fulda MS.]—F. Bücheler : Coniectanea.—W. Clemm : *Oraculum Pythium*. [Proposes to emend the line ἡ φιλοχρηματία ξεράπας δέται, καλὸς δὲ οὐδέτερος, by reading καλὸς δέται οὐδέτερος.]—N. Wecklein : On Euripides. [*Phoen.* 722 and 916.]—M. Schmidt : A Decade of Conjectures. [On Plato, Thucydides, &c.]—J. M. Stahl : On Thucyd. iv. 28.—W. Teuffel : On Plautus, *Trinum*, 725.—L. Müller : On the poem *De Sodoma*. [An attack on Haupt.]—A. Riese : On Cato. [Gell. xi. 2.]—E. Bährens : On Varro's *Saturae Menippae*.—G. Krüger : On Cicero. [Pro Sestio, 6, 14 and 11, 26.]—A. Eussner : Coniecturae in Sallustii Catilinam.—M. Schmidt : On Hyginus.—Erotemata philologica, &c.

Zeitschrift für Deutsches Alterthum, iv. 1 (Berlin).—Steinmeyer : Glossen zu Prudentius (Old High German).—Wilmanns : Metrische Untersuchungen über die Sprache Otfried's. [Attempts to settle the quantities of the end-syllables by means of the rhymes and assonances.]—K. M. : Um Ragnaröckr. [The word is a late corruption of *ragna rök*, in which *rök* is equivalent to the Old E. *racu*, and signifies "fate," by an easy process of metaphor. The usual translation "Götterdämmerung" has, therefore, no foundation in the older mythology.]—K. M. : Uuāra und Uuara. [Shows by a comparison with the Old High German forms that the separation of *wær* (foetus) and *wəru*, gen. *were* (Schutz), in Beowulf is wrong: both words should be written with the long vowel, corresponding to the O. H. G. *wāra*, which from the original sense of "truth" develops that of "fidelity" and finally "protection."]—iv. 2 (Halle).—K. Maurer : Zur Geschichte der Godenwürde. [Traces the origin and development of the Norwegian and Icelandic priesthood in heathen times.]—F. Koch : Englische Etymologien [*a-jar* from O. E. *err* (turn), *awkward* from a conjectural O. E. *afoc* = Gothic *afuk's*, big from *buan* in the sense of "adorn," *bud* from *bedling* (effeminatus), *cushat* from a hypothetical *civic-scōle*, and some others of less importance].—Zu Lamprecht's *Alexander II.*, von J. Harczyk. [Comparison of the German poem with the earlier traditions.]—L. Meyer : Zur *Germania* des Tacitus, Schluss. [Criticisms on the explanations given of various passages.]—S. Bugge : Zum Beowulf. [Valuable emendations and explanations of the text: a continuation of earlier articles in the *Tidsskrift for Philologi og Fædagogik*.]

New Publications.

BENFEY, Th. Ueber die Entstehung des indogerm. Vokativs. Göttingen : Dieterich.

DEVERIA, Th. Le papyrus de Neb-Qed, exemplaire hiéroglyphique du livre des morts, reproduit, décrit et précédé d'une introduction mythologique. Avec la traduction du Texte par Paul Pierret. Avec planches chromol. Paris : Franck.

EISENLOHR, A. Der grosse Papyrus Harris. (Vortrag.) Leipzig : Hinrichs.

QUICHERAT, L. Introduction à la Lecture de Nonius Marcellus. Paris : Hachette.

TEN JĀTAKAS. The Original Pali Text; with Translation and Notes. By V. Fausböll. Trübner.

ERRATA IN NO. 53.

Page 284 (8), 18th line from bottom, for "twelve" read "twenty-six."
,, 299 (8), last line but one, for "conception" read "corruption."

THE ACADEMY.

"INTER SILVAS ACADEMI QUÆRERE VERUM."

Vol. III.—No. 55.

Readers are reminded that the mention of New Books, Articles, &c., in our lists is intended as a guarantee of their importance. The Editor of THE ACADEMY cannot undertake to return communications which are not asked for. The Editor cannot reply to questions from authors respecting the notice of their books. The next number will be published on Monday, September 16, and Advertisements should be sent in by September 11.

General Literature.

THE FOLKLORE OF GREENLAND.

Esquimaux Tales and Legends, translated from the Communications of Native Informants. By H. Rink, Governor of South Greenland. With Supplement, containing an Appendix on the Esquimaux. [*Eskimoiske Eventyr og Sagn, oversatte efter de indfødte Fortælleres Opskrifter og Meddelelser*. Af H. Rink, Inspektør i Sydgrönland.] Kjöbenhavn : C. A. Reitzels Boghandel, 1866. [Supplement, indehældende et Tillag om Eskimoerne. Af H. Rink.] Kjöbenhavn : 1871.

THE development and significance which the study of ethnography and the history of civilisation has acquired of late years, and the small degree of trustworthiness of the information upon which we are often forced to rely, combine to magnify the importance of these communications respecting a people dwelling at the furthest extremity of the earth; the rather that they come from a person peculiarly well qualified to guarantee their authenticity. He occupies a post in that remote Danish possession which assures him an ample supply of the required information, and he is further assisted in making use of it by the fact that he has constantly endeavoured to come directly in contact with the native inhabitants, in dealing with whom his familiarity with their language is also very serviceable. To these qualifications must be added a most praiseworthy sympathy for the poor inhabitants of these polar regions, who not only have to contend against their icy, niggardly climate, but are obliged to submit to the oppression and contribute to the support of the missionaries and other European residents as well. The results of his experience and his investigations upon Greenland and its inhabitants are set down in the two volumes named above. Though they deal chiefly with the folklore of the Esquimaux, they also contain a good deal of circumstantial information on other points relating to the people, in furnishing which of course the folklore itself is amongst the most important of our sources concerning the religion, the history, the usages, and the intellectual and material condition of past and present times. Since the appearance of the first volume, the value of this work of Rink's has accordingly been so generally recognised that the supplementary volume is published at the expense of the Scientific Association at Copenhagen and the minister for ecclesiastical affairs and public instruction.

I shall return presently to the legends, but will begin by noticing some of the religious opinions of the Esquimaux, together with the usages to which they have given rise, especially those which have analogies in other countries. Thus according to the view of the Greenlanders, when still heathens, divine justice displayed itself mostly in this life,

VOL. III.—NO. 55.

yet they had also, it is said, the conception of rewards and punishments after death, and believed that witches and bad men came into the upper world, where they suffered from cold and want, and played with a walrus head, which was the cause of the northern lights; they were therefore called *Arssartut*, or "those who play with missiles." The lower world, on the contrary, where warmth and plenty reigned, was for the *Arsissut*, or "dwellers in abundance;" that is, all who had done great deeds in their earthly life, or had undergone much suffering, especially those who had perished at sea, and, lastly, women who had died in childbed, a conception which is met with also in the Marquesas islands and in the Lechrain, a district in Bavaria. The Greenlanders believed that a child murdered at its birth became an evil spirit, *angiak*, a belief also met with amongst the Norwegians and the Norwegian Lapps. The *Oromatua*, the most powerful of all the spirits recognised by the inhabitants of Tahiti, had the same origin, and amongst the Polynesians in general the ghosts of children passed as being peculiarly malevolent. It is also noticeable that the Greenlanders trace the origin of death to a quarrel between two of the first men, one of whom said : "Let day and night alternate, and let mankind be mortal;" and the other : "Let it be always evening, and may men live for ever." This tale or myth bears a striking resemblance to a South African one of which Bleek gives five different versions (*Reynard the Fox in South Africa*, Nos. 31–35, "The Origin of Death"). Singing in the ears, which is variously interpreted in different countries, is said by the Greenlanders to be the voice of the dead asking for food, while to the Scotch it announces the death of a friend (for which reason they also call it "the dead bell"—Hogg, *Mountain Bard*, 3rd ed. p. 31). The conception of the *Igdlok* or *Iguinak*, a being in the form of a half-man, with half a head, one eye, one hand, and one leg, is met with elsewhere, as amongst the modern Greeks and the Musselmans; there is no reason for supposing that the latter derived it from the Zulus (Tylor, *Primitive Culture*, i. 353); on the contrary, it is more probable that it has everywhere arisen independently. It is forbidden to point with the fingers at the *Inua* or genius of certain spots, such as mountains, headlands, and ice-fjords, because this is supposed to make him angry. The same prohibition in Germany extends to the sun, moon, and stars; and though the modern Christian explanation is that you may run a little angel through in the act, the original heathen motive for the superstition is very likely to have been the same as in Greenland, though of course it may have been formed independently in the two cases. The *Angakoks* (conjurors) and *Iliseetsoks* (witches) breathe forth fire, as in the German saga of Dietrich of Berne, and in the Anglo-Saxon *Havelok the Dane*. Amongst the accomplishments of the *Angakoks* was that of opening the bodies of the sick, taking out the entrails, washing them, and putting them back in their proper place. This too is an old idea, especially common in the East, from whence it was probably derived. Cf. my notice in the *Gött. gd. Anz.* 1868, p. 1656; to which may be added the following passage from an unpublished dialogue dedicated to the younger Lorenzo de' Medici :—

" Is (sc. medicus) ut fertur, daemones cacodaemones magica arte invocat atque coercet, lubetque ut languentis illius quem vult simulacrum vel formam daemones illi sibi deferant et eam scindant atque eviscerent: Ibi vero cum magno lumine consecratae candelae passim viscera omnia suis manibus revolvit atque oculis suis diligenter perlustrat, ut aegrotantis illius singulos intueatur languores. Tandem vero de invaletudine ac invaletudinis causa bene conscius factus, illud simulacrum reintegrari atque consui et in suum locum reduci praecipit, post vero languenti, cuius erat simulacrum medelas adhibet opportunas, si autem de salute illius desperet, id suis affinibus patefacit, ne in vanum pro salute sua

laborent. Sed aegrotantis prius ac genetricis ejus nomen solertissime perquirit, de genitoris autem nomine nihil sibi curae est, nam de vero patre incertum nomen esse dicit, matris autem certum : ne sui daemones aliam aegrotantis loco formam sibi deferent."—*Il Paradiso degli Alberti* . . . a cura di Alessandro Wesselofsky, vol. i. pt. i. p. 264, Bologna, 1867.

Evidently here the same process is applied to the image which the physician was supposed by the common people to perform on the sick person himself. Hydromancy was also known to the Greenlanders; the Angakoks used to divine from water the fate of persons and things that had disappeared. The conjurations of the Angakoks used to take place in a perfectly dark house, after they had had their hands tied behind their back and their head made fast between their legs. When the incantations were over, it was allowable to strike a light, and then the Angakok was seen free from his bonds, exactly in the approved style of a modern medium. The belief that the ghosts of departed mortals can be killed over again is not peculiar to the Esquimaux; it is shared by the ancient Hindoos, the Tartars, and many European nations, such as the Greeks, ancient and modern, the Kelts, the French, Scandinavians, Germans, &c. Further may be noticed the reluctance of the Esquimaux to pronounce the names of the dead, or of persons present, and especially their own name, a prejudice met with amongst other uncivilised races, as well as in the elder *Edda*, and in Scandinavian and apparently in early English popular verse (Tylor, *Early History of Mankind*, 2nd ed. p. 142 : cf. 127; Svend Grundtvig, *Danmarks Gamle Folkeviser*, ii. 339, 340). Any one who bears the same name as a deceased person changes it in order to deceive and escape from death, in the same way as amongst the native tribes of America and the Sunda islands. As another superstitious opinion may be mentioned the belief that evil-smelling things, especially old urine, have a peculiar power of banishing supernatural beings (comp. the Icelandic *alfreki*), and this is probably the explanation of the custom followed in Greenland of holding a vessel containing the same over women in labour, because women in that condition are supposed to be especially exposed to the attacks of evil spirits; a belief of which traces may still be found amongst civilised nations. The *couvade* in the narrower sense, when the husband, after his wife has been delivered, takes her place in bed, and remains there, while the mother gets up and goes about her business, "is only an addition, to deceive the sickness-spirit of puerperal fever, and to protect the new-born infant from the pursuits of demons desirous of substituting a changeling" (Bastian, in Lazarus and Steinthal's *Zeitschrift*, v. 153, sqq.). In Greenland a child soon after its birth is licked by the mother all over lengthwise from the head to the toes, in order that it may enjoy health and long life; in Labrador the operation is adjourned till the end of the first year. The Esquimaux believe that spirits are unable to pass through running water, a superstition that prevails amongst the Lusatian Wends, who still make a point of placing water between themselves and the dead as they return from a funeral, even breaking ice for the purpose if necessary. And Sir Walter Scott (in a note to the *Lay of the Last Minstrel*) observes: "It is a firm article of popular faith that no enchantment can subsist in a living stream. Nay, if you can interpose a brook between you and witches, spectres, or even fiends, you are in perfect safety. Burns' inimitable *Tam o' Shanter* turns entirely upon such a circumstance."

Leaving the superstitions of the Esquimaux, we turn now to their legends, with respect to which Rink remarks that the more recent amongst them show little disposition to spread along the coasts, but that on the contrary every district contents itself with recording the occurrences of the immediate neighbourhood and the last generation. The distance from Labrador makes it therefore exceedingly im-

probable that there should have been a constant exchange of legends kept up after the Esquimaux had reached their present places of settlement, and one is driven to suppose that the older legends which are common to both countries must date from a time when the present inhabitants of both stood in a much nearer relation to each other, that is to say, before they separated to spread east and westward along the shores of Baffin's Bay. The substance of the legends is partly religious, partly historical, partly poetical; but, as a rule, all three elements are mixed together, though there are also some that belong exclusively or principally to one or other class. In his section on religion, Rink has fully discussed the religious element, which is, without doubt, the most important and the most universal. The more recent legends are those which may be regarded as chiefly historical. They give us a picture of the breaking up of the nation into a number of small communities which, as above observed, only preserve the memory of quite recent events in a single spot. Such narratives generally reach back only 100 years, more rarely 150, but the narrators can upon the whole give an exact account of genealogies within this limit, that is to say, for five or six generations. However, though the persons, and the principal incidents in their life, are really historical, and correspond with the information derived from other quarters, they are nevertheless embellished with ingredients taken from older legends, and the spirit-world is made to play a considerable part in the story. As for the old Scandinavian settlers in Greenland, the ruins of their habitations are known to exist in two principal localities in South Greenland, that is, in the neighbourhood of Julianshaab and Godthaab. There can be no doubt that in the years immediately following their destruction, many tales were told concerning them by the native inhabitants, yet only two still survive; one, the most important, giving an account of a war between the Esquimaux and the Northmen, is localised in both those districts. That there should be a poetical element in the legends is a matter of course, as otherwise they would not have arrested the attention and seized the fancy of the listeners, or, in other words, they would have failed to inspire that love which has preserved the older legends unchanged for upwards of a thousand years. The legends are also important because they offer a speaking picture of the Esquimaux's way of looking at life, so that we can see at once in what respects it differs from ours. As Rink remarks, we ought not to be surprised at the absence of any pictures of what we consider beautiful in nature, for it is only in few spots that the Esquimaux catch in their summer excursions a glimpse of green valleys, with a little scanty shrubbery. Their taste does not lead them to seek out such places where they exist: far otherwise; the sea and winter with all their dangers, which the fancy pleases itself by even heightening, on the one hand, and on the other an ample provision of lard and meat, by the help of which the Greenlander bids defiance to those dangers, far outweigh to his thinking all those advantages which the sun draws from the lap of earth under a brighter sky. The legends reflect the life of man as truly as they do the moods of nature, and one does not have to read far in them to see that property counts for literally nothing, while courage and strength are everything; that some expend their strength chiefly in dashing hither and thither in their *kajak* (the Esquimaux fishing-boat), and stretching so far out to sea that at last the tops of the highest mountains look like the head of a seal bobbing up and down upon the surface of the water; that others again are admired and emulated for the fortitude with which they endure the severity of winter, and go out fishing, after all their comrades have given up the idea in despair, and so save them from perishing with

hunger ; and that there are yet again others who set at nought the infirmities of old age, and as grandfathers continue to procure the necessary means of support for their families. We see from all this how greatly the Esquimaux is absorbed in the "struggle for existence," which leaves him little leisure to admire the beauties of nature, and yet they do not escape him altogether, as we see from the following song for summer :—

" Oh summer warmth, who hast come again now—Not a breath of air stirs, ama hai.—And there is not a cloud in the heavens, ama hai—Weeping with emotion I stretch myself out upon the earth,—The good reindeer do the same—Between the mountains one sees them grazing in the dewy distance—Haija haija hai—Oh what delight, what happiness !—Aija aija haija hai !"

Still more attractive is the deep feeling for the beauty of nature in the following saga :—

" A seal-hunter in the island Aluk, on the east coast of Greenland, was distinguished beyond all his countrymen for the love of his native home, for he never left it even in the summer time. At the beginning thereof his great delight was to watch the sun rising above the waves, showing, as it sometimes will, a momentary glimmer, and then again disappearing. But when a son that he had grew up, and could not resist the desire to follow his companions on their summer's journey, he persuaded his father to travel with him towards the west. But scarcely had they proceeded so far inland as that the sun appeared to them to rise over the land instead of out of the sea, the father refused to go any farther, but turned back upon the spot. And when they had got back to Aluk, the old man left his tent early in the morning and stayed without. At first they heard his voice, but after a while everything was still, and as his children came out to look for him, they found him lying dead upon the ground, with his eyes turned towards the sun. It was joy that slew him in the very moment when he saw it again rise from over the sea."

A deep feeling for nature can scarcely be more touchingly or more impressively expressed than is the case here. We see, in this respect, too, how essential an exact knowledge of the tales and legends of a people is to the true understanding of its inner nature, and how serviceable Rink's collection is. He also communicates a series of songs, from which the following love-song is taken :

" I turn my gaze ever towards the south—For by the headlands of Isna, by the sea-shore of Isna—He will appear from the south—This is the way that he will choose,—Korsarak will surely come by the headlands,—Korsarak will surely be able to do this ;—But perhaps he will not come—Till the plaice fishing begins—Till one begins to haul in the plaice."

Besides the legends, tales, and songs, of which the two former offer many and startling points of resemblance to those of widely distant lands (as I have pointed out elsewhere, *Heidelb. Jahrb.* 1869, Nos. 7 and 8), Rink has also given us a circumstantial treatise on the means of support and the mode of life of the Esquimaux, on their language, social organization, manners, customs, and usages, their religion, their intellectual condition, the presumable birth-place of their race, and its relationship to other peoples, with, finally, the influence of Europeans upon the natives. I have already quoted some passages from this section, to which the following may be added. Before the arrival of Europeans, the Esquimaux showed scarcely any signs of spiritual development, except in their legendary poetry, and in a certain very limited proficiency in the healing art, in astronomy, and in the computation of time. As for their descent, Rink contents himself with remarking that after much enquiry it has been concluded that the original inhabitants of America do not constitute a race apart, but show, though in a lesser degree, the same kind of variation as the inhabitants of the Old World, so that from the Esquimaux, through their nearest Indian neighbours on the west coast, a gradual transition to the other Indian tribes of North America can be traced. As to the influence of Europeans on the Esquimaux, Rink observes that we have seen so many cases in which the native inhabitants of various

countries have been exterminated by the introduction, through Europeans, of sickness and intoxicating liquors, as well as by open warfare, that it is especially instructive to trace the effect of such contact when the requirements of the native population are most carefully considered, as has been done by the Danes in Greenland. The results unfortunately leave much to be desired, for in spite of all apparent good intentions, in spite of many steps taken for the security of the population, it is still chiefly regarded as an object of religious and commercial speculations. The attempt was made, it is true, to draw a distinction between the traders and the missionaries, but this proves nothing, for in the first place both systems have a common origin, and in the second both together form, as against the natives, a solid and united whole ; so that the ostensible separation only serves as a subterfuge for those who wish to justify their party at all hazards, instead of considering how the actual grievances of the natives can be righted. Without going into the religious situation of the people, still, in spite of all the missionaries, of a very meagre description, it is interesting to learn what constitutes the material prosperity of a Greenlander, and for this purpose we give the inventory of the possessions of a man who was not to be considered exactly poor, as it was taken down at Rink's instigation. He owned a very miserable little house with a clay stove in it, which he shared with eighteen other persons, but he had no boat for long voyages, and no tent. He possessed one *kajak*, with the needful clothes and implements, amongst which were two fish-lines, one rifle, one chest of small tools, two furs with stuff coverings, one coat of coarse cloth, one vest, four pairs of breeches, two pairs of boots, two shirts, and a cap. Of his eighteen housemates, three possessed a *kajak* apiece and a rifle in common, but all were much worse off for clothes than the head of the household. They were also joint possessors of three lamps and a small fishing-line, and scarcely any other household utensils. From this one can easily form an idea of the possessions of a poor Greenlander, which Rink also enumerates ; and yet there are European labourers of whom one could not give a very much better account, even in countries famed for their wealth.

As to the Moravian missions in Greenland, Rink observes that their principal purpose is to procure the society consideration in Europe by advertising its possession of four several stations in that remote country ; and it is remarkable that public opinion has been so far imposed upon as to believe not only that the European residents at them are martyrs of self-denial and self-sacrifice—whereas they really lead a very comfortable life, amongst a submissive population, secured from material cares by their official position—but also that they are the only Christian community established in Greenland, which is quite untrue.

As to school instruction, it is observable that the Greenlanders show great receptivity in other matters than religion, and possess by no means despicable abilities. Attendance at school seems more popular than in other countries, so that reading and writing are as universal as in the most enlightened parts of Europe ; while the higher instruction presents quite respectable results. It is especially remarkable to see how many of the natives combine scientific studies, which they are compelled to pursue under the most disadvantageous external conditions, with the exercise of their national industry. These and some other circumstances which speak favourable for the natural capacity and moral disposition of the Greenlanders give us a ray of hope for their future in spite of many darker shadows. This ray will be the more welcome to the philanthropist as the population has already fallen off frightfully. According to

Egede's estimate in the middle of last century, the population of Danish Greenland amounted to about 30,000; in 1863 it had diminished to 9461, while in Labrador the proportion is still more distressing. These numbers speak for themselves, and confirm the experience made elsewhere of the effect of contact between Europeans and uncivilised nations; so that it would seem the Danish government has not yet hit upon the right method of protecting the native inhabitants of Greenland. I cannot omit this opportunity of referring to an excellent work in which the subject under discussion has been exhaustively investigated. I mean Georg Gerland's book, *Über das Aussterben der Naturvölker*, Leipzig, 1868.

Here I must take leave of Rink's very attractive and instructive work, which, besides its other merits, has that of correcting several erroneous statements of Egede's and Crantz's, while its own intelligence may be received with unlimited reliance. Besides this, there are a number of woodcuts, executed by a native artist, to serve as specimens of inland art; also a photographic group of forty-one Greenlanders, partly of pure, partly of mixed descent; and two pretty chromo-lithographs of Greenland scenery, executed by a printer of the latter class. It is interesting to compare these woodcuts with those in Mitford's *Tales of Old Japan*, which were also the work of native artists: these last have certainly a higher degree of technical merit, as was to be expected from the superior antiquity of the art in Japan; but in correctness of proportion and drawing, the palm certainly belongs to the Greenland Dürer. FELIX LIEBRECHT.

Souvenirs de la Maréchale Princesse de Beauvau, suivis des Mémoires du Maréchal Prince de Beauvau, recueillis par Mme Standish (née Noailles), son arrière-petite-fille. Paris.

THE princesse de Beauvau was one of the very few personages of the *ancien régime* who lived through the Revolution, until the Empire, without ever varying in her opinions or her conduct. She and her husband, who was fortunate enough to die a natural death in 1793, were amongst the most eminent members of the liberal aristocracy which did so much to make the Revolution possible by protecting "philosophers" from persecution and making enlightenment fashionable. The present volume is a monument of the princess's constancy at once to her husband's memory and to the principles of '89, and it reads rather like the life of a righteous man, for whose sake the city might have been spared, had there been fifty such within it. The memoirs, chiefly compiled by Saint-Lambert, the life-long friend of the maréchal, are practically an apology for the eighteenth century, a plea for the governing classes, that, if they had had time, they would have reformed the government for themselves. It is curious to read a list of the good deeds of Louis XV., though the writer's view of him is substantially that which has since prevailed; but every page gives a fresh illustration of the chasm between the court and the people, which prevented even the virtues of the court reaching those whom they were meant to benefit. The prince de Beauvau was thoroughly upright and conscientious, but half the occasions of his opposition to the crown were mere personalities—e.g. he would not allow his wife to visit with Mme Du Barry, and the dangers he so courageously encountered were, literally, the royal frown and nothing more. The king showed his displeasure by not speaking when etiquette condemned them to drive out together, and this was political martyrdom; but the country at large naturally never heard of either the offence or its punishment, so it ignored the merits of the victim.

A more important exercise of public virtue was his oppo-

sition to the decree abolishing the parliaments in 1771; as governor of Languedoc, he persisted, in spite of direct instructions to the contrary, in releasing fourteen old women from a life-long captivity in the Tower of Aigues-Mortes, where they had been imprisoned for Protestantism ever since the Dragonnades. In his *discours de réception* at the Academy, he set the fashion which has found so much favour since, of wrapping up a political rebuke in apparently loyal and decorous phrases. It was soon after the disgrace of his friend and relative, the duc de Choiseul, and he took advantage of the usage which obliged him to praise the reigning monarch to praise him for all the measures planned and executed by the discarded minister. Voltaire was delighted with the artifice, and expressed his admiration in one of those wonderful effusions of humility of which he was so fond: "The reed, lifting up its little head, says very humbly to the oak," and so on. After the accession of Louis XVI. the prince was appointed to the government of Provence, and we can readily believe that his administration was just, merciful, and as enlightened as the central authority would permit. He saw that the prosperity of Provence depended on its seaports, and we might never have heard of the *Marseillaise* if a plan which he recommended with some warmth had been adopted. He proposed to bestow on Marseilles the privilege of religious liberty and freedom of trade, so as to attract thither all the commerce of the Mediterranean; the court objected, and he used to say to his wife, "Nous ne sommes pas encore assez mûrs, j'y reviendrai, on s'éclairera;" but unfortunately it was already 1788, and half Aix was starving from the suspension of the *Parlement de Provence*. His last appearance in history is in 1789, when he was invited to take a place in the council of ministers; he at first made his consent conditional on that of Malesherbes, but an urgent letter from Louis XVI. caused him to reconsider his resolve; he remained in the council for five months, and then passed into retirement. He had never been much in the confidence of the royal family, and though of course he continued loyal to the last, he watched the course of the revolution with melancholy tolerance. His conscience had been troubled long before on the score of feudal and seigniorial rights; he had wished to abandon them formally, but was baffled by an entail, and when the law abolishing them was passed, he hastened to make all the sacrifices it imposed on him. Yet there must have been a good deal of the old aristocratic leaven left, for his wife, who shared all his thoughts, rejoiced in 1795 that he had not lived to see "le désordre et le déplacement de toutes choses," exemplified by a peasant-woman's having money enough to buy a feather bed (p. 108). It is easier to sympathize with her gentle regrets when armorial bearings were made illegal, not that they were necessary to her dignity, but because they had been dear to her since her lost husband's arms were first quartered with her own.

The first half of the volume, the *Souvenirs*, is the expansion of a sentiment which we must let the maréchale express in her own words:—

"Pour expliquer comment deux personnes se sont aimées pendant quarante années, non comme amis, non comme époux, non plus même comme amants, mais comme s'ils n'avoient été créés que pour jour l'un de l'autre, pour confondre leurs goûts, leurs intérêts, pour trouver de continuels motifs de se préférer à tout, pour ne se quitter jamais sans peine, ne se retrouver jamais qu'avec un plaisir mêlé d'émotion; pour expliquer, dis-je, la nature de cette intime union, il faudroit un nom qui ne convint qu'à elle. Celui de *passion* me semble le seul de ceux que nous connaissons qui pourra en donner l'idée."

This "passion" was nearly as famous in Parisian society as the less legitimate flames of Mmes d'Houdetot or d'Épinay. When the prince de Beauvau was about thirty-five, a widower with one daughter, he began to frequent the salons of Mme

de Clermont, one of the most attractive hostesses in Paris, and a lady upon whose reputation even that scandalous age never ventured to reflect; their marriage did not take place till ten years later, when the mature age of the parties added to the piquancy of that rare spectacle, a pair of married lovers. Thirty years of conjugal felicity were followed, for the maréchale, by thirteen years of pious devotion to the memory of the departed: her regrets, it has been seen, are expressed with some elegance, and in excellent language; but after all the theme is monotonous, and it must be admitted that we do not read her reminiscences altogether for the sake of the excellencies of him to whom they are dedicated. Other witnesses represent the prince as somewhat cold and formal in manner, scrupulously honourable, with only moderate original talents, but of wide and cultivated intelligence. It was he who said, with the magnificent condescension of a *grand seigneur*, in addressing the Academy, that the king "voit avec plaisir les personnes de sa cour briguer dans cette compagnie l'honneur de devenir les égaux des gens de lettres." Two other anecdotes must complete the portrait. He was dangerously wounded in his first battle, and as he was being carried from the field, an officer stopped to pity "le jeune brave," as he was called in the army. He smiled, and replied by quoting the line—

"Et mes derniers regards ont vu fuir les Romains."

Some years later a French army was besieging Mahon, on the island of Minorca: wine was cheap, and it was found impossible to keep the soldiers sober. The prince de Beauvau suggested the publication of an order forbidding every soldier found drunk from joining in an assault for a week afterwards, and we are assured that drunkenness ceased like magic.

What distinguishes this book from so many other volumes of memoirs is that a single life is the thread which connects these last days of chivalry with the foundation and rise of the new order of things. The traditions of the *grand siècle* were in full force when the maréchale was young; she sat at the feet of Voltaire, and was so devout a "philosophe" that after her husband's death she refused even to regret "cette opinion consolante de la réunion dans un autre ordre de choses" which had not been his. In 1764 she signalled as remarkable a phrase in a parliamentary remonstrance, "l'opinion commande à la multitude, et la multitude commande à la force;" and after watching the first warnings of the coming storm, she lived to see it both break and spend itself. Another family memoir gives a very graphic description of the salon in which, true to her old habits, the maréchale used to receive her surviving friends under the Empire. Her dress was rich, but of ancient cut; the *cafetière* was gold, the china priceless; the lackeys aged and infirm, but with an air that said they had seen good society, and made their criticism a thing to be dreaded. The maréchale's voice was weak, and every one spoke low for courtesy; the company was mixed—some surviving philosophers converted to imperialism, some returned *émigrés*, one or two old and intimate friends. The new men came to give themselves an air of *ancien régime*, the Faubourg Saint-Germain came to show its liberalism, M^{me} de Staél came to admire the grand old lady who had been her father's friend: but the most welcome guests were still those who could talk about M. le maréchal, and encourage her in the pious hallucination that he was not wholly dead while she lived to preserve his memory. Marmontel describes her in his memoirs as "la femme qui a toujours raison," so perhaps we ought to believe on her authority that it was the fault of circumstances and the misfortune of France that the prince did not take a more conspicuous and influential part in public affairs. At any

rate the double chronicle of her constant affection and the life of her lord—it must be admitted that the two are mixed together rather perplexingly—makes a monument with which a greater man might be contented.

H. LAWRENNY.

The Life and Labours of Mr. Brassey. By Arthur Helps. Bell and Daldy.

Most eminent men never have their lives written at all; they are commemorated in the first instance by an amorphous collection of materials for a biography, and then by a series of *résumés* and reflections on the biography which has not been written. Mr. Brassey has escaped the common fate: no one can say that Mr. Helps has given us undigested materials instead of a book; yet he has not given us exactly a life of Mr. Brassey or a history of his labours. Instead he has written the *prolegomena* to a work which is hardly likely to be written, and, if it were, would find fewer readers than the pleasant sketch which he has given of Mr. Brassey's singularly winning character and of the conditions of his vast success. Mr. Helps in one respect was better qualified for his task than almost any writer; he has long been occupied with the problem of organization, and in approaching the life of a great organizer he knew at once what questions to ask. He points out very clearly how all the conditions necessary for the enormous development of railway enterprise had been gradually accumulated in England, and gives an interesting summary of the experience of Mr. Brassey and his agents, of the capacity and idiosyncrasies of the workmen of different countries, with the result that the practical cost of labour scarcely varied, among extreme variations of the rate of wages. But the main interest of the book lies in what must have been the attraction of the subject to the writer, in the numerous illustrations which Mr. Brassey's career supplies of the homely wisdom which just evades being commonplace, and almost seems recondite because it is neglected, which has served for so many years to exercise the trained perception of *Friends in Council*. Perhaps the most striking fact is that Mr. Brassey's average profit on his contracts was barely three per cent.; the most edifying is that he seems to have owed his success much more to his character than even to his abilities, great as these were. There were many men who understood the business of railway construction equally well; but he was able to obtain the lion's share of it because he was peculiarly safe, and still more peculiarly pleasant to deal with, and because his good nature and judicious trustfulness enabled him to take work in a sense easily. It is seldom that optimists can point to such a splendid confirmation of the maxim that "Honesty is the best policy."

G. A. SIMCOX.

LITERARY NOTES.

The Russian government is said to be preparing to publish a complete collection of all autograph letters, orders, memoranda, &c. of the czar Peter the Great, including those of a private as well as of a public character.

The literary remains of the poet Bürger, which have hitherto been withheld from publication, and include letters and poems of considerable interest and value, have now, it is stated, passed into hands which give hopes of their soon being made accessible to the public.

From St. Petersburg we hear of the discovery, near Kertch, of a remarkable catacomb with walls covered with battle and hunting scenes: the sarcophagi are empty, but are supposed to be of Scythian origin, and to date from about the fourth century B.C. The frescoes give an exact representation of the dress

and accoutrements of a Scythian warrior, which in some respects resembled the old Russian costume.

The free-trade in light literature which the house of Tauchnitz does so much to forward will doubtless end by raising the standard of fiction throughout the inhabited globe, but just at first it gives rise occasionally to criticisms which have a very comical sound when they come back to the native country of writers who are prophets abroad. The *Allgemeine Zeitung* assures its readers that in *Wilfrid Cumbermede* Dr. George Macdonald "discusses the most serious and important life-problems without ever falling into a didactic tone, or becoming wearisome." The same reviewer admires the "Sprachgewandtheit" of a novelist for whose interpretation "even the best dictionaries leave us in the lurch." Did the reviewer try the *Slang Dictionary*?

The *Revue des deux Mondes* (August 15) prints some very pleasant letters from Admiral (then Commandant) Page to the wife of the Marquis de la Grange; they were written between 1844 and 1848, from various quarters of the globe, and express very much the feelings which a literary landsman would describe if he were trying to imagine himself in the position of a sailor. The singularity is, not so much that an active and able officer should have leisure for such emotions, but that he should be able to express them with as much ease and propriety as if they were unreal.

In a paper read before the American Philological Association, Mr. Trumbull gave a respectable Indian etymology for the much-discussed and much-abused word *caucus*. It comes from an Algonkin root, signifying "speak, encourage, instigate"; the least corrupted form of the word is *kaw-kaw-wus*, plural *kaw-kaw-wus-sough*, "caucuser," "councillors, council"; the Virginians, out of the same word, made *cockarouse*, a name for the chief man in a tribe. As the settlers were fond of adopting native names for their political gatherings, the suggestion seems highly plausible.

We understand that Mr. Morris's early poems (not *The Defence of Guinevere*) will be reprinted about Christmas, with an equal quantity of new matter.

THEOLOGICAL NOTE.

Mr. Henry Dunn, in his last work (*The Churches an History and an Argument*; Simpkin, Marshall, and Co.), has carried the idea of Protestantism as purely individual Christianity nearer to complete logical development than any previous writer. He maintains that the Christian societies we find in the New Testament, though divinely organized, were provisional, and lost their *raison d'être* when inspired men had disappeared, and the inspired writings had been collected. Since then all associations between Christians exist only *jure humano*, and are most useful when we recognise that they are optional. The writer is a continuator of John Foster and of Isaac Taylor, the author of *Antient Christianity*. He spends much perverse ingenuity on the theses that the Lord's Supper was originally an household rite, and that Baptism is essentially a profession of faith, though there is some plausibility in the guess that there may have been a time when it was only administered to converts. The writer believes that the object of the Christian dispensation is to train the elect to take part in the subjugation and renewal of the world after the Second Advent; and that the object of the hierarchical organization of the church was to convert the world prematurely and superficially. So far as we can admit a deliberate change, the object was rather to fix and maintain the faith.—Mr. Dunn insists, not without reason, that the traditional compromises inevitable in an organized society have to some extent lowered the Christian ideal, but he takes no account of the extent to which the standard of conventional propriety has been, and is being, raised, nor of the danger that, if everybody were left to make his own compromise with the ideas, the practice of half believers would be lower than it is. As the writer makes the personal union of the individual believer with the person of Christ the essence of Christianity, he ought in consistency to have rejected the traditional Protestant notion of the unique supremacy of Holy Scripture, as he has rejected the traditional Protestant notion of the sacramental value of

preaching. He is too unfamiliar with scientific investigations to put his views in a form to be enforced, or even seriously discussed; but he has a refinement and distinction of mind which are often the fruit of sustained and solitary earnestness, and these make what he says not unworthy of attentive consideration.

Art, &c.

THE DRAMA IN PARIS.

THE great heat has closed most of the Parisian theatres. The Comédie Française, however, remains open, and is giving several very interesting works, among which *Le Chandelier* of Alfred de Musset holds the chief place. This audacious but beautiful play was first performed in 1848 at the Théâtre Historique (now the "Porte St. Martin"), and transferred to the Française two years afterwards, where, after a few representations, it was forbidden by the censure. Now, however, its own intrinsic merit, and the talent of the actors who interpret it, seem to promise it a long and prosperous existence. The story is simple enough. A bold dragoon, Capitaine Clavaroche, is quartered in a country town. The café is dull, the theatre indifferent; he therefore turns his attention to his neighbours' wives, and wins the favour of Jacqueline, wife of the local solicitor, Maitre André. The lovers are on the brink of discovery when the captain's somewhat dull intellect suggests to his mistress the idea of selecting a "chandelier;" that is, a young man who shall be admitted to her confidence up to a certain point, and no farther, so as to divert all suspicion from her real admirer. Her choice falls on the youngest of her husband's clerks, Fortunio, a boy of eighteen, who has long loved her in secret. The end is not hard to guess. Fortunio is generous and clever, Clavaroche selfish and dull—a difference which the lady is not slow to observe, and makes her choice accordingly. Of this work, rather a poem than a drama, Fortunio is the central figure. De Musset seems to have set himself to draw a boy of a generous, high-spirited character, in all the glow and ardour of his first love. His heart is full of a respectful passion for his beautiful mistress, whom he worships at a distance, as a being of another world: his joy knows no bounds when he thinks his love returned: he is broken down with wild anguish when he discovers why he has been tempted to think himself preferred: but in all his passionate outpouring of sorrow and reproach, there is no thought of mean revenge; she has broke his heart, but he loves her as truly as ever, and is ready to make any sacrifice to prove it. This difficult character is realised by M. Delaunay with singular ability. He is at least forty-eight years old, but manages to look and move as if he were barely eighteen, and even to infuse a certain boyish eagerness into his voice. The tone and manner in which he gives the long speech in which he muses upon woman's faithlessness and his own wretched lot is quite indescribable. It is a bitter cry of despair, coming straight from the depths of a generous heart, that has learnt for the first time that smiles may deceive, and vows be false. More admirable still, if possible, is the last scene, where he upbraids Jacqueline, less in anger than in sorrow, and faints away at her feet, worn out by his emotion. Mme Madeline Brohan is a charming Jacqueline, and M. F. Febvre realises the rough sensual Clavaroche most completely.

The Orestes of Mounet-Sully, the young actor whose *début* at the Théâtre Français has been so successful, is unquestionably a remarkable performance. In the first place, it has brought four or five thousand people together twice a week to see one of the most stilted and dreary tragedies of the classical epoch, the *Andromaque* of Racine, which is of itself no small feat: and it raises them at times into genuine enthusiasm. One would like to know, however, whether any one has gone a second time! The actor is a strong, well-made, handsome young fellow—rather too fond, perhaps, of showing off his personal attractions, especially a pair of muscular and not ungraceful arms. He has been thoroughly well taught, and knows how to turn his lessons to the best account. The result is a performance of much vigour and intention, rising at the end into a stately pathos when Orestes, stung by the reproaches of Hermione after the murder of Pyrrhus, becomes mad. But from the beginning to the end the character is so unsympathetic that one cannot do more than admire the art, while one regrets the fustian on which it has been bestowed. From such a commencement it is impossible to predict the future. He may be a great artist, or he

may not. To tell him, on the faith of what he has already done, that he is a second Talma, as the French critics are doing, is as absurd as it is unfair to him. The result may be, if he is not wiser than they are, that he will rest contented with his first success, and make no further progress. He is to appear next in Corneille's *Cid*, and afterwards in one of Victor Hugo's dramas, either *Hernani* or *Marion Delorme*, probably the latter. Either will give him an excellent opportunity of showing what his real talents are. An adaptation of *Othello* is said to be also in preparation.

J. W. CLARK.

Paris, August 22.

ART NOTES.

A special commission was appointed under the Empire to report upon the Fine Art collections deposited in the museum of the Louvre, with a view to relieving the overcrowded state of these collections by making from them a selection of works which might be properly entrusted to other museums or to buildings of a sacred character. This commission has now finished its labours as far as they concern the paintings which are to be removed: the total number of which is, as stated by M. Charles Blanc in his report recently published in the *Journal officiel*, 885. Of these, 180 are of the Italian school; 50, of the Flemish and Dutch schools; and of the French, 655. The Italian are for the most part copies, or works of the second and third class; the same may be said of the Dutch and Flemish, and of a large proportion of the French. Where the works are attributed to a good name, it is invariably a doubtful attribution. As soon as these paintings have left the field clear by their departure for the provinces, the commission will proceed to attack the terracottas, ancient and modern sculpture, enamels, vases, and Egyptian antiquities. All the works purchased by the department of the Beaux-Arts at the recent Salon are to be submitted to the approval of the public before distribution.

M. Champfleury is about to publish his *Souvenirs et Portraits de Jeunesse*. The volume will contain a biography of Courbet, of Bonvin, and others, the materials for which have been furnished by letters and personal intimacy.

Henry Trappes, who is well known by his etchings, and chiefly by his illustrations to *Gil-Blas*, recently committed suicide, it is said in despair at some family complications. He was hardly thirty-seven years old.

The great exhibition at Milan opened on August 26. The artistic congress held in connection with it took as its principal question for debate the teaching of drawing in so far as it may be made a portion of primary instruction. The inauguration of the monument erected by the Milanese to Leonardo da Vinci took place on the 28th.

The École des Beaux-Arts is making rapid steps towards importance amongst the museums of Paris. As soon as the library was commenced, M. His de la Salle presented to it a hundred drawings selected from amongst the most valuable in his collection. M. Gatteaux also bequeathed all his books, his drawings and engravings. M^{me} Bertin has now enriched the collection by the gift of eighteen drawings which were accounted amongst the finest of those which figured in the posthumous exhibition of her brother's works, the last of the French landscape painters who held by the traditions of Poussin, and, it may be added, of Francisque Millet.

The first half of the second volume of Andresen's *Handbuch für Kupferstichsammler* has just appeared. It has been edited and completed since the death of the author by J. E. Wesseler. The two other unfinished works left by Andresen, viz. *Der Deutsche Peintre-Graveur* and *Der Deutsche Malerradirektor des 19. Jahrhunderts*, have also been undertaken by the same writer.

It is said that the architects Bohnstedt, Kaiser and Grossheim, Ende and Böckmann, Mylius and Bluntschli, have been invited to take part in the final competition for the German Houses of Parliament. Their new plans are to be sent in April 1, 1873.

Hans Makart, Alma Tadema, August Pettenkofer, Franz Defregger, Oswald Achenbach, and Caspar Zumbusch, are on the list of those recently confirmed as honorary members of the Munich Academy of Fine Arts, by the king of Bavaria.

The *Zeitschrift für bildende Kunst* for August 9 contains an article on "Barbarian Types depicted by the Ancients," by Professor Conze, illustrated by a lithograph from a marble supposed by the writer to be the portrait of a German woman, now preserved at St. Petersburg in the Hermitage.—Carl Justi concludes his essay on Philipp von Stosch and his time; and Bode's notes on the artists of Haarlem also come to a close.—H. Ludwig ends his paper on the uses of petroleum in oilpainting.

In December 1862, Herr Oberstlieutenant Pfau of Winterthur came into the possession of one of the many repetitions of that composition of Raphael's which is well known by the name of the Madonna di Loreto. The apparent merit of this particular example has caused a claim to originality to be put forth on its behalf. The grounds on which this claim may be supported, together with much interesting matter relating to the history of the painting in question, will be found in a little book entitled "*Die Madonna von Loreto*—eine kunstgeschichtliche Untersuchung von S. Vögelin," published at Zürich in 1870.

The death of M. Charles Duron has just taken place at Paris. M. Duron, born in 1814, at Pont-à-Mousson, was a distinguished artist in enamel. Some of his happiest works became the property of the Marquis of Hertford, and of Baron Rothschild.

Professor E. Magnus, born at Berlin, 7th January 1799, has just died there at the age of seventy-three. Professor Magnus was a pupil of Schlesinger, whose valuable studies after the Sixtine Madonna he recently presented to the print room of the Royal Museum. He especially excelled in portraits; nearly all the princes and notabilities of Germany have been painted by him. His portraits of Jenny Lind, of the Countess de Ross-Sonntag, and of Mendelssohn, were exhibited at the Paris Universal Exhibition in 1855.

The jury for the Berlin Goethe memorial have awarded the three prizes offered, to the sculptors Adolph Donndorf, of Dresden, Fritz Schaper, and Rudolf Siemering, of Berlin. These three artists are invited together with Alexander Calandrelli to take part in a final competition.

Oberlieutenant Joseph Reiter, commandant of the fortress of Klissa, in Dalmatia, has been named corresponding member of the Institute for Archaeological Correspondence at Rome, as a grateful testimony to the services rendered by him in the preservation of two Roman sarcophagi in the neighbourhood of Salona.

The largest and most important of the fragments of the carved column dug up by Mr. Wood, on the supposed site of the temple of Diana at Ephesus, has been set up in the Graeco-Roman room at the British Museum. It measures about 6 feet in height, and 18*1* feet in circumference; and is supposed to have formed a portion of the first drum of one of the thirty-six Ionic carved columns which, with ninety-one others, supported and adorned the edifice. Portions of the base and capital of the column were found close by (*Academy*, vol. iii. p. 285). On the side of the drum there are five figures which, though not without intrinsic merit, derive their chief beauty from the admirable architectural intention which is manifested in the treatment and grouping. All are more or less mutilated, but there are sufficient indications to identify one as Mercury, and another as Victory.

A new bust of Mr. Gladstone is on view in the great hall of the Reform Club. It is by Mr. J. D. Crittenden, whose "Christ anointing the Eyes of the Blind" was one of the works in the sculpture room of this year's Royal Academy exhibition.

In repairing the roof of Dumfriess House, Ayrshire (formerly the property of the Earls of Kilmarnock, but now in the possession of the Marquis of Bute), some workmen discovered two half-length portraits rolled up, and hidden in the rafters. On

examination one proved to be the portrait of the Earl of Kilmarock who was executed for rebellion in 1746; and the other after some difficulty was identified as that of John Drummond, Earl of Melfort, outlawed in 1694. These portraits had been removed from their frames and hidden away in consequence of the political peril formerly attaching to their possession. Another portrait of Drummond, engraved and published by Vandembanc, was named, not Melfort, but Lundin, Lady Melfort's family name—the name of Melfort being tabooed.

A collection of original drawings by William Blake has been sold recently by Messrs. Sotheby and Wilkinson. The collection consisted of—the set of twelve illustrations to Milton's *Paradise Lost*, which fetched 100*l.*; the set of eight illustrations to Milton's *Comus*, 20*l.* 10*s.*; the set of six illustrations to *The Hymn*, 5*l.* On the same occasion, an early drawing by W. Hunt, "The Cottage Door," 4*l.* 7*s.*, and "Childe Roland," by Burne Jones, 4*l.* 2*s.*, were also disposed of. To the same firm was entrusted the sale of the valuable library of Mr. André Knox, which took place August 14 and five following days. One of the most interesting of the many fine illuminated MSS. which were then disposed of was *Horae Beatae Mariae Virginis*, 4*to*—a beautiful MS. of the fifteenth century, on vellum, with thirteen large paintings, every page ornamented with borders of great elegance in design, capital letters, &c. This volume was formerly in the possession of Samuel Rogers, who attributed the work to Oderici, the contemporary and friend of Giotto and Dante, and it contains an MS. note in Mr. Rogers' hand. It is bound in morocco, with the cypher of Charles II., of whose collection it once formed part, stamped on the back and sides. 9*l.* Messrs. Sotheby also disposed of the collection of coins and medals of the late Wm. Jackson, of Lancaster. Some of the most valuable pieces were the following:—a gold octodrachm of Ptolemy III., 26*l.*; an octodrachm of Ptolemy V., 29*l.*; of Ptolemy VIII., 24*l.*; a pattern five-piece of George III., by Pistrucci, 2*l.*

New Books.

- BIBRA, Ernst v. *Alte Eisen- u. Silberfunde. Archäologisch-chemische Skizze.* Nürnberg: Richter u. Kappler.
 BÖTTICHER K. Von dem Berliner Museum. Eine Berichtigung an A. Conze in Wien. Berlin: Ernst u. Korn.
 POUY, F. *Les Faïences d'origine picarde et les Collections diverses.* Amiens: Lenoel-Hérouart.
 SEIDL, Fr. Xav. *Dichtungen vom Morgenlande.* Nach e. Orig.-Inscr. bearb. Regensburg: Forchthammer.

Physical Science.

The Morphology and Physiology of Plants. [Botanische Abhandlungen aus dem Gebiet der Morphologie und Physiologie. Herausgegeben von Dr. Johannes Hanstein, Prof. der Botanik an der Universität Bonn.] 1870–1871.

[SECOND NOTICE.]*

In turning to the memoirs, two of which form the subject of the present notice, the first relating to the development of the Embryo in Phaenogams, the second to the structure and fructification of Diatoms, it will scarcely fail to be remarked that where the subjects are at all cognate, much advantage will be derived from reading them in connection. Indeed, as the paper on the development of the radicle by Reinke was prepared under the express supervision of Dr. Hanstein, the author of the important memoir with which the series was opened, and which now comes under revision, the two may almost be considered as emanating from the same source, and I have no hesitation, from my own experience, in stating that Reinke's observations are an excellent preparation for the full understanding of his superintendent's larger and more important dissertation. Undoubtedly the whole is well worth a careful study, but no one point seems to me of greater interest than the development of the embryo of Brachypodium, because it completely settles the theory which was originally broached by Richard

as to the nature of the organ called by him vitellus, and which I confess that I had long considered as true. If this is regarded as the primary radicle, the subsequent ones being all adventitious, Gramineae are placed in the same category as other Monocotyledons, in the greater part of which the primary radicle is evidently exorhizal. On following out, however, the gradual development of the embryo from its earliest stage, it becomes quite evident that the first rootlet is endorhizal, and that the so-called vitellus is really an absorbent portion of the cotyledon. This is, in fact, in accordance with what takes place in some palms, the onion, and other cases, where a portion of the cotyledon remains in contact with the albumen long after the development of the radicle and plumule, deriving nourishment from it for a considerable time, while the development of the embryo of Brachypodium is almost exactly like what occurs in *Tropaeolum*, where even the suspensor can readily be traced in the ripe seed just at the point of germination, and where the real primary radicle bursts through the hood (*Haube*) exactly as in Brachypodium. The nomenclature adopted by Reinke, though somewhat complicated, is really of value in indicating the true relations of the several parts of which the descending axis is composed.

As regards the second memoir, on Diatoms, by Dr. Pfister, we have in it a full confirmation of the important observations which were made by Mr. Thwaites† before leaving England for Ceylon, and which at once settled the question as to the vegetable nature of these singular organisms. The point of especial interest in the paper is the elucidation of the mode in which the two portions of the outer siliceous envelope overlap each other, thus facilitating the multiplication of the individual as distinct from the fructification. Few matters are more interesting as regards microscopical observation than the mode of propagation, and where the different species of *Biddulphia* can be readily procured as on our southern coasts, they will afford ample food for many a morning's investigation. The two original halves remain exactly *in statu quo*, and it would be interesting to know how long they would subsist while new intermediate frustules are developed; and the same observation applies to many Desmidaceae. It is much to be wished that these very useful and important memoirs should receive such encouragement as may ensure their continuance. The Ray Society would do well to include them in the number of their acceptable translations.

M. J. BERKELEY.

Notes of Scientific Work.

Geography.

Central Africa.—The whole of the geographical information contained in the numerous letters written by Dr. Livingstone and safely brought home by Mr. Stanley, has by this time been sifted, and as the great traveller has turned back into the mysterious central land of Africa, our knowledge of his accomplished work will in all probability remain at its present stage for a long period. Until the explorer shall himself appear to confirm or correct what he has given us, the geography of equatorial Africa will rest on Livingstone's own data. The discussion by geographers at the British Association and elsewhere, of the outlines of information thus vouchsafed, has wrought great changes in the accepted hydrography of the land. Before these letters arrived, it was believed that the Nile had a main tributary at least in the Tan-

† The whole subject of Cryptogamy is deeply indebted to Mr. Thwaites for the patient investigation he was able to devote to it before leaving England. Amongst other matters, his memoir on the gonia of Lichens in *Annals of Nat. Hist.* ser. ii. vol. iii. p. 219, will be read with interest, as anticipating those of Schwendener in *Nageli's Journal*, though taking a far more rational view of the subject than that which supposes that Lichens are Fungi parasitic on Algae. Cohn has lately called in question the justice of Schwendener's views in the *Botanisch Zeitung* (March 1870); but he is wrong in supposing the threads in Palmellae are always extraneous. A comparison of Mr. Thwaites' observation on *P. botryoides* in the same journal (vol. i. p. 319), as confirmed in Berk. *Intr. to Crypt. Bot.* p. 399, will be sufficient to show the connection of the threads and spores. A similar structure prevails in the gonioid cells of the anomalous genus *Emericella*, *t. c. p. 342.*

Tanganjika Lake and its feeders far south of the equator ; for a connection had been traced on apparently good grounds between this basin and the Albert Lake and the Nile by an outflowing river. The Chambeze-Luapula of Livingstone with its lakes might also, so far as our information then went, prove to be the head of the Nile, though probabilities were in favour of its being rather the headstream of a river flowing westward. We learn now from Livingstone and Stanley that the Tanganjika is not in the Nile basin ; its outlet (for being a lake of perfectly fresh water, it must have an outflow) is not to the Nile ; but it is highly probable that its discharging river is the Lufiji, on the east coast. Moreover, taking Livingstone's own measurement of the level of the great Chambeze-Lualaba system that he discovered, at its furthest point, the river could not be the Nile, for it is here exactly the same height above the sea as Gondokoro, known to be on the Nile, 800 miles away. The Lualaba could not join the Albert Lake, as it lies upwards of 500 feet above the given elevation of the river, not to mention the very mountainous country of Ulegga, spoken of by Speke, Baker, and Livingstone, which intervenes to prevent it. Dr. Schweinfurth's explorations, carried on contemporaneously with those of Livingstone in Manyuema, by tracing the rivers forming the Bahr-el-Ghazal to their sources, have shut off the only inlet which seemed possible to Dr. Livingstone himself. The conclusion is evident that Livingstone, though searching for six years with this object in view, has never once seen the Upper Nile at any point. It has been suggested that a great inland lake may receive the waters of the Lualaba, but such a continental system in the equatorial forest region of Africa, saturated by double rainy seasons, is a physical impossibility. Any lake in this belt must overflow. The only outlet on the west coast, capable of discharging such a volume of water as that accumulated by the Chambeze-Lualaba and its lakes, is the Congo ; and the second conclusion forced upon us is that it is the Upper Congo river which the great traveller has now made known.

Upper Nile.—The results of Dr. Schweinfurth's latest remarkable journey in Dar-Fertit in the beginning of 1871 are fully described in the current part of *Petermann's Mittheilungen*. In former journeys Dr. Schweinfurth had explored and mapped out the source country of the Rohl, Tonj, and Jur tributaries of the Nile rising westward of Gondokoro. These rivers flowing northward unite in the Bahr-el-Ghazal, which joins the Nile above the ninth parallel of north latitude, and have hitherto been considered as the chief streams of this lateral system. In his last journey, however, the traveller, by going westward, has crossed the upper streams of a river named the Abu Dingā, which he identifies clearly with the Bahr-el-Arab, a tributary of the Ghazal formerly considered to be of small importance, but now proved to be the longest and largest branch of the Bahr-el-Ghazal system.—Ernest Marno, a traveller in Upper Sennaar, has sent to Gotha a full report of his journeys in this region during 1870-71, and a most valuable map, which it is said will add greatly to our knowledge of the territory of the Abyssinian Nile. His letter from Khartum of the 6th December 1871 brings the following intelligence :—Great political changes have recently taken place ; Jaffar Pasha has been deposed from the ruling power in Sudan ; Muntas Pasha has obtained the government of the districts of Khartum Fashoda (Bahr-el-Abiad), and Sennaar ; Kordofan, Taka, and Dunga, with Berber, have each received a separate ruler. The government recently seized upon a number of slave boats, and slaves to the number of from 3000 to 4000 were brought to Khartum. No provision having been made for such an influx, the greater number died within a few days. Muntas Pasha had not arrived, the remaining officials did not trouble themselves in the matter, and soon the dead lay before every house and all along the river banks, a fearful epidemic among the settled inhabitants being the result.—The most varied reports are in circulation respecting Sir Samuel Baker's expedition, but this at least is certain, that he is still (in Dec. 1871) at Jebel Redjeft, not far from Gondokoro. In consequence of the great number employed, the expedition encountered great obstacles, that increased as it advanced into the less known country ; the troops have been so greatly reduced and demoralised by sickness and hunger that it is the opinion in Khartum Baker must soon return.

Western Mongolia.—The active exploration by the Russians during the last few years of the geography of the region of Mongolia lying next to their Siberian possessions, and the establishment of new relations, political and commercial, with these countries, would lead us to suppose that the annexation of these lands to the great empire is seriously contemplated. A very important map of this region accompanies the last part of *Petermann's Mittheilungen*. It is based on Klaproth's map of Central Asia, which was drawn from the surveys made by the Jesuit missionaries of Pekin by order of the emperor Khian-loung, and upon that of M. Veniukov which accompanied the seventh number of the *Izvestija* of the Russian Geographical Society for 1871 ; but the map is filled in and greatly amended from the journeys of the Russian travellers Schishmarev (1864-65), Palinov, and Matusovski (1870), containing besides a reconstruction of the routes of Prinz (1863) and the artist Atkinson, so far as they bear upon this part of Asia. These tracks cross Mongolia in sufficiently various

directions to form a trustworthy basis on which the detailed topography of this inner Asiatic plateau may now be accurately laid down.

Morocco.—Though formerly little visited by Europeans, this country has of late attracted many explorers, as the names of Rohlf, Gubernatis, Balanza, Beaumier, Lambert, Gatell, Blackmore, Hooker and Ball abundantly testify. The French military expedition under General Wimpffen from Algeria to the Wady Gir in Morocco, during March, April, and May of 1870, also form the subject of an essay in the *Mittheilungen*. The primary object of this undertaking was the dispersion of the armed bands that harassed the people of the Algerian Sahara, the most powerful of which, the tribe of the Dui-Menia, had their home in the Wady Gir, not far north-west of the oasis of Tafilet. The map accompanying the paper, in which the line of march of this expedition is seen almost to join the route made known by Rohlf in 1861-1864, shows that great gain to geography has also resulted.

An *Abstract of the Reports of the Surveys and of the other Geographical Operations in India for 1870-71*, just issued, contains an interesting chapter on recent geographical exploration. In continuation of his plan for systematically exploring the countries beyond the British frontier, Major Montgomerie despatched a trained Pathan Havildar of Sappers direct from Peshawur to Faizabad, the capital of Badakshan. This interesting tract of mountain land between the Indus and the Kabul rivers, bounded on the north by the Hindu-Kush and Mustagh ranges, had been sealed to all attempts at exploration. The Havildar crossed over from Yusufzi into Swat, went thence to Chitral, then up the lofty and difficult Nakshan pass to Zebak on the Upper Kokcha, and descended the valley to Faizabad. He fixed the positions of the Nakshan and Dora passes, and took latitude-observations at five points. His route survey is 286 miles in length, and has opened out 13,000 square miles of hitherto unknown country.—During the autumn of last year, Mr. Blanford, of the Geological Survey, examined the eastern and northern frontiers of British Sikkim, reached the Donkia pass, 18,500 feet above the sea, ascertained the position of another pass never before marked on any map, discovered three unmapped lakes, and made a good collection of birds.—Our knowledge of the geography of Persia has also received valuable additions. Captain St. John, after co-operating with Col. Walker in determining the longitude of Tehran, has fixed the latitudes of places between Shiraz and Tehran, correcting an error of ten miles in the position of Kashan, and has completed a survey of the Elbourz Mountains. Meanwhile Major Lovett has made a journey from Shiraz to Kerman and Bam, and corrected the position of Niviz, an important place at the eastern extremity of the valley of Persepolis. From Niviz the road traverses a pass, 5,640 feet above sea-level, over the range of Loivez hills, a mountain-chain requiring thorough geographical and geological exploration to its termination near the shores of the Persian Gulf. Beyond these hills is the desolated valley of Kotro stretching away in a direction south of east, with no visible limit. Major Lovett travelled thence to Khairabad, at the foot of the Tung Chal, a granitic range, and, crossing at an elevation of 8000 feet, reached Kerman. He then journeyed north-east to Khabis, and corrected the mistaken position of this place on Pottinger's map. Khabis, the terminus for kafilahs proceeding across the deserts to and from Seistan or Meshed, abounds in fruit, including eleven kinds of *Aurantiaceae*. The surveys of St. John and Lovett have furnished valuable materials for a new map of Persia.

The *Zeitschrift der Gesellsch. für Erdkunde zu Berlin*, No. 38, contains an elaborate paper by Dr. Neumayer on the exploration of the South Pole. He has prepared a full *résumé*, extending over fifty pages, of the literature of the subject, illustrated with a very good map, and given the details of a scheme which he laid before the Geographical Congress at Antwerp for prosecuting a further exploration of that region. He proposes that it should be combined with an expedition to observe the transit of Venus, and, starting from the Cape of Good Hope, and making the M'Donald Group head-quarters, should endeavour to push on from Kemp's Land toward the pole. The essay has since been published in a separate form.

Physiology.

The Influence of the Central Nervous System upon Animal Heat.—A very interesting essay on this subject containing the results and details of many experiments has just been published by Dr. Franz Riegel in *Pfliiger's Archiv für die gesammte Physiologie* (No. 12). Dr. Riegel first repeats and corroborates the generally known fact that division of the spinal cord in the neck, opposite the sixth cervical vertebra, is followed by a steadily progressive diminution of temperature. The cause of this fall of temperature might be attributed to paralysis of the vasomotor nerve, leading to dilatation of the vessels and consequent increased evaporation and exposure of the blood to the cooling influence of the air ; or it might be due to this cause, combined with diminished production of heat within the body of the animal ; or, lastly, it might be due to a proportionally increased loss of heat, though the production of heat be augmented. Riegel set himself to determine which of these

views is correct. For this purpose, control experiments were requisite on every point : on the effects of chloroform and of morphia injection ; of keeping the animal in a warm room ; of binding it ; of the frequency of the respirations, which are greatly diminished by section, &c. He agrees with Tscheschichin that there is no increased internal development of heat after section of the cord, and that the fall in temperature is to a certain extent due to the dilatation and increased evaporation from the cutaneous vessels. But he even goes beyond this, and considers that there is an absolutely diminished production of heat in an animal after section of the cord, and that all his experiments favour the view that the application of heat to the peripheric cutaneous nerves constitutes an excitation which travels centripetally to the respiratory centre, and acts reflectorily upon it. The healthy animal possesses in this reflexorial excitation of the respiration a highly important heat-regulator, and it is consequently easily intelligible why the external application of heat, if this regulator be not annulled, causes no rise of temperature in the healthy animal. This reflexorial increase in the rapidity of the respiration explains why other observers in their researches on "the effects of external heat" have observed no increase of temperature in uninjured animals. Division of the spinal cord removes the channel the more perfectly the higher the section is made.

The Gases of the Blood.—MM. Mathieu and Urbain contribute to Brown-Sequard's *Archives de Physiologie* (No. 2) the results of their enquiries into this subject, especially in regard to the proportion of gas contained in the blood of different arteries. The researches of Claude Bernard have shown that the quantity of gas contained in venous blood varies with the condition of activity or of repose of the organ whence it proceeds. Though the greater or less amount of oxygen absorbed by the tissues explains these variations very well, a second interpretation has been proposed, namely, that the diminution of oxygen in the blood is due to intra-vascular oxidation taking place at the expense of the blood itself. On this view the oxidation which is well marked in the veins commences in the pulmonary capillaries, and continues in the arteries, causing a gradual disappearance of the oxygen, the loss attaining its maximum in the veins. As a consequence of this, the arterial blood does not everywhere present the same composition. MM. Estor and St.-Pierre actually concluded from their experiments that whilst the blood of the carotid contained 21·06 per cent. of oxygen, that of the crural artery contained only 7·62 per cent., so that 13·44 per cent. of oxygen disappears in the course of a second or two ; the authors attribute this sudden change to the occurrence of incessant intra-vascular oxidation. MM. Mathieu and Urbain's experiments may be divided into two groups : first, those in which the proportion of gas contained in the blood of arteries of nearly equal diameter was compared ; and, secondly, those in which that from arteries of different calibre were examined. As regards the former, they found that no remarkable difference could be detected between the carotid and crural artery : in one case, for example, the proportions were for the carotid, oxygen 20·45 per cent., nitrogen 1·64 per cent., carbonic acid 48·18 per cent. ; and for the crural, oxygen 18·03 per cent., nitrogen 1·60 per cent., carbonic acid 44·23 per cent., the slight difference being due to the effect of the first bleeding. On the other hand, in comparing the blood of large with that from small arteries, the amount of oxygen in the former was invariably greater than in the latter, the difference sometimes amounting to 3 per cent.

The Anatomy of the Spleen.—M. Wedl, in a paper contained in the *Sitzungsberichte der Wiener Academie*, vol. lxiv. pt. I, observes that it is not difficult to inject the veins of the spleen, and exhibit the venous ramifications by the corrosive method. When the spleen of a sheep is thus treated, the following appearances are seen :—Each main vein with its dilatation receives branches opening into it peripherically, and these again receive numerous branches from certain intermediate spaces. These branches are sometimes so minute that they can only be discerned with a lens. The angle of entrance of each set of vessels into the larger ones is nearly the same, as well as the distance from one another, so that a branch resembles a small cone beset with prickles. He was unable to discover the venous plexuses or anastomoses described by W. Müller. Another mode of examination he adopted was to fill the vessels with coloured solution of gelatine, and then to harden this with alcohol, which process allows of fine sections being made. At the points where the veins present constrictions, processes may be seen by this means to pass into the cavity of the diverticula of the veins. These processes are of two kinds : one a papillated inflection of the venous wall; the others are trabeculae forming incomplete septa. Wedl found, as Gray and Frey have done, no venous rootlets within the Malpighian corpuscles. As regards the epithelium demonstrated by Billroth in the delicate veins of the pulp, Wedl always found it complete, never discontinuous, as stated by Frey. His investigations show that the blood path is also continuous, the blood passing from the arteries into capillaries, and thence into veins, and not at any point through lacunae of the tissue.

On the Coagulation of Fibrin.—A. Schmidt (*Medizinisches Centralblatt*, No. 16) finds that, in blood drawn from the living vessels, a

ferment originates from the action of the blood corpuscles which causes the coagulation of fibrin. The material for the fermentation is afforded in the fibrinogenous and the fibrinoplastic substances, which must be simultaneously exposed to the action of the ferment in order that the fibrinous coagulum may be formed. The action of the blood corpuscles upon the fermentation process is dependent on the haemoglobin, though other substances that condense oxygen upon their surfaces and catalytically decompose peroxide of hydrogen act in the same way, such as spongy platinum, carbon, &c. The transudates found in the cavities of the dead body for the most part contain the two fibrin generators, but no ferment, and they will coagulate on the addition of the ferment. In some the fibrinoplastic substance is absent, and requires to be added before coagulation will occur. Neutral alkaline salts and low temperatures arrest the process. To obtain the ferment, the albuminous substances of the blood must be coagulated by maceration for fourteen days in concentrated alcohol ; the fluid is then filtered, and the residue on the filter dried at a low temperature, pulverised, and extracted with glycerine.

The Structure of Striated Muscle.—Four papers have recently appeared upon this subject : one by J. H. L. Flögel, in *Schultze's Archiv*, viii. 69 ; a second by W. Dömitz, in *Reichert und du Bois-Reymond's Archiv*, 1871, 434 ; a third by G. Wagener, in the *Marburg Sitzungsberichte* ; and a fourth by F. Merkel, in *Schultze's Archiv*, viii. 244—discussing the structure of the primitive muscular element of Articulata. Flögel gives a description of the muscles of a species of *Trombidium* (a small arachnidan, of which the common minute red spider of gardens is an example), and states they are composed of a series of compartments divided from one another by septa which from wall to wall contain : (1) a simple and feebly refracting substance, which strikes a slight tint with perosmic acid ; (2) a granule which, with its neighbours on either side, forms the granule layer, and is strongly stained by perosmic acid ; (3) another layer identical with the first ; (4) the double and strongly refracting substance which becomes deeply stained with the acid ; (5) the same as the third layer ; (6) the same as the second ; and (7) as the first.—Merkel agrees with Flögel in considering that the fibres of muscle are divided into compartments (Muskelkästchen) by transverse septa.—Dömitz, on the other hand, returns to the old view that the primitive morphological element of the muscle is the fibril and not the compartment. His researches appear to have been chiefly made on the Crustacea.—Wagener admits the existence of Hensen's intermediate stria, but adds that there are from two to eight secondary ones which are constantly present, but are very fine. He describes the act of contraction in the following terms. The anisotropic and doubly refractive substance, with the intermediate stria of Hensen and the adjoining striae, contract and approximate to one another, and then the two isotropic and singly refracting striae, originally separated by the broad anisotropic band, become so compressed together that they are only separated by a single feebly marked line.

Anthropology.

Etruscan Antiquities found in Belgium.—A Belgian antiquary, M. H. Schuermans, calls attention (*Bulletin de l'Academie royale de Belgique*, p. 528) to certain objects found in a tomb at Eysenbilsen, north of Tongres, in 1871, viz. (1) a fillet of gold ; (2) a cylindrical cista of bronze ; and (3) an oenochoe of bronze, with the figures of two fabulous animals confronted on its neck. There appears to be no doubt that the articles in question are of an Etruscan character. But it is very rash on the part of M. Schuermans (as his critics, MM. Roulez, Wagener, and de Witte point out, *ibid.* p. 513) to conclude that they must have found their way from Etruria into Belgium previous to the displacement of the original Celtic population by the Germanic race which Caesar found in possession of the district where the recent discovery took place, seeing that his argument relies on a series of combinations which are anything but satisfactory. In the first place, it is not just to take the statement of Caesar (*Bel. Gall.* i. 1) with regard to the Belgians generally *minimeque ad eos saepe mercatores commaneant*, in the sense of *nullum aditum esse ad eos mercatoribus* afterwards (ii. 16) applied by him to the Nervii, a tribe which despised the rest of the Belgians for their submission to the Roman dominion. And if it were just, there is no difficulty in supposing a relaxation of the laws against foreign traders after Caesar's time. The fault of this supposition, however, is that it does not fall in with M. Schuermans' notion of the high antiquity of the articles about which he writes. In the second place, the passage of Livy (v. 33) refers to the supremacy of the Etruscans by sea and land up to their decisive defeat by Hiero I. of Syracuse, B.C. 474, and has nothing to do with the spread of their wares north of the Alps, while the passage of Pliny (xxxiv. 16) concerning the *signa tuscanica* to be met with in various lands applies to statues, not to utensils, and moreover need not be taken as referring to so very early a period, or as including Belgium in the "various lands." In the third place, the fact that in Greece solder was in use instead of rivetting in bronze work as early as the fifth century B.C. cannot be relied on to prove that the bronze cista (No. 2), in which rivets have been employed instead of

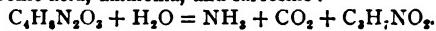
solder, was made previous to the fifth century B.C. For the artists of Etruria, and more especially the workmen, we should suppose, took very few hints from the Greeks, even in later times of greater commerce. But after all, there are many who give good reasons for believing that the objects looking like Etruscan found of late years in great numbers north of the Alps—notably at Hallstatt, in 1868—and also conspicuous for the absence of solder in the bronze work, are really ancient productions of the native workmen of the countries where they are found, owing their resemblance to objects found in Etruria, both in manner of manufacture and style of decoration, to a common inheritance of skill and taste which the southern nations developed more quickly. In that case we should be still less surprised if a Greek invention of the sixth century B.C. did not reach the native workmen in distant parts of Europe till after Caesar's time.

Excavations at Mzchet.—If Fr. Bayne has hit upon the right way of accounting for the uniform presence of not less than three skeletons in one sarcophagus in the ancient tombs of Mzchet, near Tiflis, he will have contributed a valuable commentary to the statement of the geographer Strabo concerning the practice of sacrificing human beings which existed among the natives of that district in his time. In any case, the report on the excavations among these tombs, the first instalment of which is given in the *Zeitschrift für Ethnologie*, part iii. 168, will prove an important addition to our knowledge of the condition of ancient civilisation in that quarter. Distinguishing the sarcophagi of the native Iberians from those of the Greek residents, he describes the former as of two classes in point of size, the smaller containing always three skeletons, the larger more than four, usually six, skeletons. The rule with regard to the smaller sarcophagi is to find them containing one grown person decked with ornaments of gold and pearls, and accompanied by two children with ornaments of bronze of a rude pattern. In cases where the two companion skeletons are of larger make, the ornaments are still of this common material and pattern. In the larger sarcophagi, on the other hand, there is a marked absence of ornaments throughout, from which Bayne concludes that the tenants must have been ordinary victims sacrificed to the gods, while with respect to the triple occupation of the lesser sarcophagi, he considers that the two secondary persons—generally children—had been sacrificed in token of grief at the decease of the central and conspicuous person. The most appalling result of his researches is that the victims appear to have been buried alive. The sarcophagi which he ascribes to the Greek residents contain only one skeleton, beside which, in one instance, he found a bronze mirror, such as the tombs of Kertsch usually yield, and an engraved onyx with a Greek name inscribed on it.

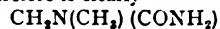
The Engis Caves.—These caves, where Schmerling carried on such successful explorations, have been further examined by E. Dupont, who has laid his report before the Académie royale des Sciences de Belgique (*Bulletin*, No. 6). He found a human ulna, and bones of *Ursus spelaeus*, *Rhinoceros*, *Sus scrofa*, *Equus caballus*, *Cervus tarandus*, *Cervus elaphus*, and *Bos primigenius*. A great number of flint implements were also met with of a form resembling those from the caverns of Sureau and Magrite; drawings are given of some from the second cave in which Schmerling found the human skull.

Chemistry.

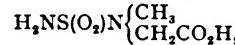
The Origin of the Urea of the Animal Body.—Schultzen showed some time since that certain nitrogenised substances, containing but one atom of the element, are converted in the animal body into urea, and suggested that the final oxidation-products of the amidated acids, of leucine, glycocine, &c., may be either bodies of the cyanogen group or carbamic acid. If animals yielding a uniform amount of urea be given glycocine or leucine, they secrete an increased amount of urea exactly corresponding to the nitrogen of the leucine or glycocine supplied to them. The objection could of course be raised that the increase of urea arose from the substance introduced acting like fever-poison. Though no symptoms of fever were observed, to meet this difficulty, a substitution-glycocene was chosen for the experiment, methyl-glycocene or sarcosine being preferred. According to a recent paper (*Ber. Deut. Chem. Gesell. Berlin*, No. 12, 578), if a well-nourished dog be given, in addition to his ordinary food, the amount of sarcosine the nitrogen of which corresponds to that of the urea daily secreted, urea and uric acid disappear altogether from the urine, and are replaced by a series of new and definitely characterized bodies, the examination of which cannot fail to explain as yet unknown normal processes of interchange of matter in the animal organism. One of the substances is obtained by the author's method as the acid of a baryta salt; the other, which forms brilliant tabular crystals, has the formula $C_4H_8N_2O_2$; when heated with baryta solution in closed tubes, it splits up into carbonic acid, ammonia, and sarcosine:



Its rational formula therefore is clearly



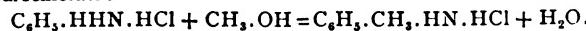
and it may be regarded as a urea the two atoms of hydrogen of one atom of nitrogen of which have been respectively replaced by methyl and acetic acid, or as a sarcosine in which the group $N(CH_3)H$ has the H replaced by the group NH_2CO of carbamic acid, NH_2COOH . The author traces the formation of the new body to the combination of sarcosine and carbamic acid with separation of water. The acid body combined with baryta was found by analysis and a study of its behaviour when heated with baryta to have the composition



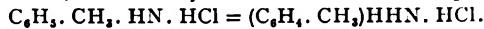
that is, of a compound of sulphamic acid with sarcosine *minus* water. Here then is the sulphamic acid of the bodies, albuminous and gelatinous, which the sarcosine has met, and which under normal conditions is transformed into sulphuric acid and ammonia, the latter combining with carbamic acid to form urea. It is a point of no little interest to know the form in which the sulphur is contained in the complex bodies of these two classes. Under normal conditions fowls convert the greater part of the nitrogen of their food into urea of ammonia; when plentifully supplied with sarcosine, however, they fail to secrete any uric acid, and produce new and definite substances, the characters of which are now under investigation. The details of this interesting research are to appear in the *Annalen der Chemie*.

Analysis of a Bronze Celt.—The implement in question, one of many found at Salzberg, near Hallstatt, has been examined by E. Prwoznik, of the Vienna Mint (*Annalen der Chemie*, clxiii. part 3, 371). It was remarkable for having a crust of a reniform or botryoidal structure, and an indigo-blue colour; being from 5 to 7 mm. in thickness, diminishing near the edge to 2 mm., and weighing nearly 100 grammes. On the inner side the crust was in some places coated with a thin layer of bright green basic carbonate of copper. The first or outer, and in fact the chief, layer is very brittle, and has a fracture which, when fresh, exhibits an imperfect metallic lustre and a distinctly radiate structure; the streak is very deep blue, almost black. It is composed of 33·22 per cent. of sulphur, and 66·77 per cent. of copper, being in fact covellite (CuS), to which mineral it likewise bears the fullest resemblance as regards specific gravity and other physical characters. The second layer, found only in certain portions of the crust, is separated from the first layer with difficulty; it has a blackish-grey colour, is about 0·5 mm. thick, and consists of copper-glance (Cu_2S), through which is disseminated about 15 per cent. of tin. This metal, it will be remarked, is not present in the outer layer. The third layer, sparsely distributed, consists of a black powder composed of 59·8 per cent. of copper-glance, 23·2 per cent. of tin, 3·4 of water, with traces of antimony and nickel. The unchanged bronze of the Halstatt weapons was shown by v. Schrötter to have the composition: copper, 90-92 per cent.; tin, 6·5-9·0 per cent., and traces of six other metals, which traces have been detected in the several parts of the crust. It follows then that this crust is due to a direct chemical change of the bronze, and not to deposition from without. The tin and the other metals appear to have moved from without inwards as the alloy became broken up on the conversion of the copper into sulphide by soluble sulphides or gases containing sulphuretted hydrogen. The author has succeeded in covering fragments of antique bronzes with a layer of blue copper sulphide by long treatment with yellow ammonium sulphide. The presence of zinc as a constituent appears to prevent copper alloys from undergoing this change. Knop ascribed the formation of covellite to the decomposition of copper pyrites, by oxygen and water containing carbonates, into carbonate of iron and copper-glance, and the production of covellite and copper oxide from the copper-glance by the continued action of those reagents. The author's view of the formation of this mineral has the advantages of being less intricate, and of deriving support from direct experiment.

Conversion of Aniline into Toluidine.—This has been accomplished by A. W. Hofmann (*Ber. Deut. Chem. Gesell. Berlin*, 13th August, 720) in the following manner:—By heating one molecule of aniline hydrochlorate with one molecule of methylic alcohol for many hours at 230° to 250°, there is formed a yellow transparent resinous mass of the consistency of honey, consisting for the most part of methylaniline hydrochlorate:



If the tube be now heated for a day to 350°, it undergoes a complete change. The transparent viscous fluid is converted into a beautifully crystalline mass, the secondary salt is transformed into the primary:



The solid mass is almost completely soluble in water, and by treatment with alkali liberates the base as a brown oil, which, when distilled in an atmosphere of steam, solidifies in the receiver into a brilliant white mass of toluidine, the melting-point of which is 45°. In this reaction but few by-products are formed. Aniline hydroiodate furnishes a liquid toluidine. The author intends to attempt the formation in a similar way of homologues of the amines of other classes, and of some of the

bases occurring in the organisms of plants. One of the by-products of the action of heat on trimethylated phenylammonium iodide is a beautifully crystallised hydrocarbon melting at 136° , and boiling between 230° and 240° . It gave the formula $C_{12}H_{16} = C_6(CH_3)_6$, and is supposed by the author to be benzol, the whole of the six atoms of hydrogen of which have been replaced by methyl. If it be so, he considers that the oxidation of such a compound will yield products worth investigation.

Fall of Aérolites in France.—The *Compt. rendus* of the 29th July contains a note from M. de Tastes, addressed to the Academy of Sciences, and presented by M. Sainte-Claire Deville, describing the fall of an aérolite in the neighbourhood of Lancé, in the canton of Saint-Amand, Loir-et-Cher. At $5^h 20^m$, Tours mean time, on the 23rd July a brilliant meteor passed over a spectator stationed between Champigny and Brisay towards the north-east in the direction of Tours. It presented the appearance of a spear of flame with two spheres of fire of an orange colour; the track of one seemed to incline downwards, that of the other to proceed straight forward, the whole appearance becoming somewhat more luminous at the instant a slight divergence of the course of these two spheres was first seen. It was lost to sight behind a cloud near Sainte-Maure, and an explosion was heard at $5^h 26^m$. Many observers affirm that they heard two distinct explosions very near together, others noticed but one; all testify to the appearance of two meteors pursuing nearly the same path. A meteorite fell in a field near Lancé, and passed a metre and a half through the light soil into a bed of marl. It weighs 47 kilogrammes; some fragments separated by the fall were found near it.—In the last number of the *Compt. rendus*, for the 5th August, is a note by M. Daubrée recording the more recent discovery of a second meteorite at Pont-Loisel, 12 kilometres south-east of Lancé. The line joining the two localities coincides with the direction of the trajectory of the meteors, and the Pont-Loisel stone, though much smaller (it weighs 250 grammes), bears the closest resemblance as regards mineral characters to the Lancé stone. The smaller stone fell first—a circumstance observed in former showers—and penetrated the soil to a depth of only half a metre.

Conversion of Tartario into Racemic Acid.—M. Jungfleisch announced at a meeting of the *Société chimique* held last month that tartaric acid may be almost completely transformed into racemic acid by heating it in a closed vessel at 172° to 175° for a dozen hours (*Revue scientifique*, 28th July, 68). He exhibited several hundred grammes of racemic acid prepared by this method, and established its identity by a careful examination of the racemates.

Writing from Florence to a recent number of the *Ber. Deut. Chem. Gesell. zu Berlin*, H. Schiff reports the progress made since 1867, in the publication at Turin, of the *Encyclopædia chimica*, edited by T. Selmi, of Bologna. This great work is arranged very much after the form of the first edition of the *Handwörterbuch* of Liebig, Wöhler, and Kopp, and five quarto volumes of it have already appeared, embracing about 1000 pages and bringing it down to the letter F. The articles on theoretical and organic chemistry are by Schiff, Sestini, Paternò and others, those on technical chemistry by Arnaudon, of Turin; many are said to exhibit a completeness hardly met with in German works of the kind. Some indication of the degree in which the *Encyclopædia* is appreciated in Italy is shown by its boasting over 2000 subscribers.

The directorship of the new laboratory at Rome has been offered to Dr. Hugo Schiff, who will however remain at the Florentine Institute, which has been even more richly endowed by the Italian parliament than the institution at Rome, the charge of which has been undertaken by Prof. Cannizzaro.

New Publications.

- ANDERSSON, C. J. Notes on the Birds of Damara Land and the adjacent Countries of South West Africa. Van Voorst.
- BALTZER, E. Der Mensch immiten der Natur. Leipzig: Dürr'sche Buchhandlung.
- BOUVIER, C. Pharmakologische Studien über den Alkohol. Berlin: Hirschwald.
- BRÜCKE, E. Studien über die Kohlenhydrate und über die Art wie sie verdaut und aufgesaugt werden. Wien: Gerold's Sohn.
- CZERNY, V. Ueber die Beziehung der Chirurgie zu den Naturwissenschaften. Freiburg: Wagner'sche Buchhandlung.
- GEIKIE, J. On Changes of Climate during the Glacial Epoch. London: Trübner.
- GRÄBER, V. Vorläufiger Bericht über den propulsatorischen Apparat der Insekten. Wien: Gerold's Sohn.
- HUMBOLDT, Alexander v. Eine wissenschaftliche Biographie. Im Verein mit R. Avé-Lallement, J. V. Carus, A. Dore etc. bearb. und herausg. von K. Bruhns. Leipzig: Brockhaus.

- LEITGEB, H. Zur Morphologie der Metzgeria furcata. Graz: Leuschner und Lubensky.
- MÄDLER, J. H. v. Geschichte der Himmelskunde. I. Band, 6. und 7. Lieferungen. Braunschweig: Westermann.
- NAGEL, E. Der natürliche und künstliche Schlaf. Wien: Ficht.
- SEIDLITZ, G. Die Parthenogenesis und ihr Verhältniss zu den übrigen Zeugungsarten im Thiereich. Leipzig: Bidder.
- STRASSBURGER, E. Die Coniferen und die Gnetaceen; eine morphologische Studie. Jena: Dabis.
- ZENGER, K. W. Der Differentialphotometer. Prag: Grégr und Dattel.

History.

Contributions to the History of the Literature of the Times of Thököly and Rákóczi, 1670-1735. By M. Kóman Thaly. [Adalékok a Thököly- és Rákóczi-kor Irodalomtörténetéhez.] Pest: Ráth.

THESE two volumes refer to that interesting portion of Hungarian history known as the *kurucz világ*—an expression which we may perhaps be allowed to translate by “insurgent world.” The word *kurucz* is derived from the Latin *crux*, and the name was first applied to the peasants who in 1514 were collected by the pope's legate for a crusade against the Turks, but turned their arms against the nobles. This name was assumed by the insurgents, mostly peasants or members of the lowest sections of the nobility, and almost exclusively Calvinists, who in 1672 rose against the intolerable fiscal oppression and religious persecution practised by the lieutenants of the emperor Leopold I. The assumption of the name *kurucz* pointed to an essential distinction between this insurrection and the political wars of religion that had filled the earlier part of the seventeenth century. In these earlier wars the political classes had taken the initiative, and reasons of statecraft and the interests of the princes of Transylvania had limited the extent and duration of the warlike operations. On the other hand, the insurrection of 1672 was—at any rate in its beginning—a popular movement, excited by oppressions affecting the lower classes of society. Hence the revival of the word *kurucz* of demagogic memory. With varying fortunes, and under diverse leaders, the insurrection continued until it culminated in the expulsion of the Germans out of the whole of Upper Hungary by Thököly. He was recognised by the sultan as vassal king of Upper Hungary, and the vezier in 1683 proceeded to lay siege to Vienna. The defeat of the Turks by Sobieski and Charles of Lorraine (*tringyai Károly*) involved the ruin of Thököly. In vain did his heroic wife, Zrínyi Ilona, defend the rock of Munkács for more than twelve months. The Turks were slowly but steadily driven out of Hungary. Transylvania submitted to the rule of the house of Habsburg. Thököly was interned, a helpless exile, in Asia. A series of victories had laid Hungary at the feet of Leopold the “Great.” Not only the fear they inspired silenced opposition, but a large part of the nation felt that the expulsion of the Turks was a benefit so great as to counterbalance many evil deeds on the part of the German government. Under such circumstances it was natural that the old oppressions should be repeated by the foreign—German and Italian—agents of Leopold, to end in the same result. In 1703 a second *kurucz* insurrection broke out in the same part of the country as the first—along the banks of the upper Tisza. Prince Francis Rákóczi II., son of Zrínyi Ilona by her first husband, was placed at its head. The expulsion of the Turks from Hungary, which at first seemed to render the prospects of the insurrection doubtful, really enabled it to assume more formidable dimensions, as it spread over the whole country from the north-eastern

Carpathians to the frontiers of Styria and the banks of the Drave. So strictly *kurucz* was it in its origin that the first officers of the insurgent's army were swineherds, barbers, tailors, &c., elected by the peasants themselves. Nor was it until he had achieved several successes that Rákóczi received the adhesion of the nobles, who but gradually and a few at a time joined his standard. After many successes and reverses, the exhaustion of the country, the wiser and more conciliatory spirit of Leopold's sons, and the success of the allies against Louis XIV., Rákóczi's ally, put an end to the insurrection in 1711. One of Rákóczi's lieutenants, Alexander Károlyi, a man of great ability and prudence, negotiated for the insurgents the Peace of Szatmár, which closed the long period of internal wars which had wasted Hungary with but slight intermissions for more than a century and a half. The character of the warfare then waged is incidentally revealed by such words in the Hungarian language as *hajdu*, *katona*, *szegény legény*, which have fluctuated between the meanings of "soldier" and "robber," and it is repeatedly alluded to in the present collection, especially in the *labancz* or anti-*kurucz* pieces. The leading spirits of the insurrection, Rákóczi and Bercsényi, however, refused to recognise the treaty, and betook themselves to the hospitality of foreign sovereigns, the Czar of Muscovy, the King of France, the Sultan of Turkey. In 1735 Rákóczi died in exile at Rodosto, on the shores of the Sea of Marmara, leaving behind him a name which, in spite of his want of ultimate success, or perhaps on account of it, has enjoyed a larger measure of posthumous fame than any other in Hungarian history.

Such is the period which the lamented historian, M. Szalay, himself spoke of as the most interesting and instructive in the history of his country, but death put an end to his labours before he had completed his account of the times of Rákóczi. In its investigation and illustration M. Thaly, mindful, as he tells us, of the maxim, "ars longa, vita brevis," has already spent the spare moments of twelve years. During this time he has examined nearly a hundred and fifty public, family, and private archives. The results of his researches have appeared in his *Life of Blind Botyán*, one of Rákóczi's generals, and several other historical works relating to the "*kurucz* world." While carrying on these investigations, he kept in view not only what is still considered by many in its narrowest sense history, the record of wars, battles, negotiations, administrative measures, &c., but also the literature of the times, revealing more or less clearly the degree of culture attained by the nation or individuals, the passions and the beliefs which sustained them during the long internecine struggle. The result is the two volumes before us, the first containing the poetry illustrative of the insurrection of 1672 and the career of Thököly, the second that illustrative of the insurrection of Rákóczi.

As long ago as 1864 M. Thaly had conceived the plan of this present work. In the preface to his collection, entitled *Old Hungarian War-songs and Elegies*, published in that year, he stated that the pieces of a later date than 1670 had been reserved with the view of publishing all relating to the "*kurucz* world" in a separate collection. In like manner he has excluded from the present work all pieces of a later date than 1735, the year of Rákóczi's death. At present, to judge from his preface, he does not see his way to publishing a collection of them. In 1864 he had collected about sixty or seventy *kurucz* poems, but he deferred their publication from two motives. Not only did he entertain hopes—now happily fulfilled—of rendering the collection more complete, but the police regulations relating to the press—M. Schmerling being then in the height of his power

—would have rendered the publication of such "rebellious" literature difficult, not to say impossible. Since 1864 the collection has been augmented not only from MS. in public and private archives, but also by an extensive correspondence with and personal enquiries from all sorts of persons who might be supposed to have any knowledge of the subject—descendants of *kurucz* leaders, surviving members of old bands of gipsy musicians, and the like. In Hungary, as elsewhere in Europe, the conviction prevails that the old world is definitively passing away, that now, if ever, must be collected the wrecks of tradition which have withstood the assaults of time, but are fast disappearing before the railroad and the common school. Not the least interesting or instructive reading in the two volumes before us is afforded by the history given of each piece, its preservation, and its discovery. M. Thaly writes on this subject with a genuine enthusiasm which perforce communicates itself to the reader. As the most striking instance in point, we would refer to the account given (ii. pp. 227-241) of the scarcely suspected survival of the original music of the *Rákóczi-nóta* down to the present day.

The collection itself is sufficiently miscellaneous. With the exception of two dialogues out of the *Actio Curiosa* (noticed in the *Academy*, vol. ii. p. 473), sixteen unpublished letters of the poet Gyöngyösi, a Latin cento on the Diet of Szécsény, and two Latin hymns, all the pieces are in verse and in the Hungarian language. Most of these Hungarian poems express the sentiments of the *Kuruczok*, a few those of the *Labanczok*, or partisans of the Habsburgs. The larger number, including those of the greatest value as historical documents, are popular poems composed by uneducated or half educated men, but the collection also includes poetry written by persons of culture, illustrating not merely the struggle but also the ideas then entertained about literature. We have a good number of the unflinching loyalist Count Koháry's long-drawn effusions, lamenting his undeserved misfortunes—he was for three years a prisoner in the hands of Thököly—in a monotonous strain of somewhat provoking self-complacency. By way of contrast we have one specimen given us of the unpublished poems of Petróczy Kata-Szidonia, the wife of the *kurucz* leader, the last Count Pekry. It is marked by pathos and "distinction," but the versification has that monotonous character so general in the Hungarian verse of the seventeenth century. The most important from a literary point of view is an abridged version of a hitherto unpublished poem, 499 stanzas in length, on the marriage of Thököly and Zrinyi Ilona. It has neither title nor name of author, but is evidently written by a contemporary imitator of Gyöngyösi. The latter poet, be it observed, was a steady adherent of the *labancz* cause. The foot-notes elucidating the allusions in the text are very useful, but occasionally there ought to be more of them. The spirited piece in the second volume (pp. 121-128) which describes the state of Kolozsvár when besieged by the *kurucz* army is composed in a style so terse as to be often obscure. And surely there must be many Magyar readers who will not understand the strange jargon of the Slovack insurgent in vol. ii. p. 376. The two volumes form a valuable addition to our knowledge of the period, and mark a long step towards the composition of a regular history of the *kurucz világ* which M. Thaly half promises us.

ARTHUR J. PATTERSON.

Heimskringla, eller Norges Konge-sagaer, af Snorri Sturlasson. Udg. ved C. R. Unger. Christiania : 1868.

THE *Heimskringla*, or *Lives of the Kings*, written by the old Icelandic historians, exist in miscellaneous collections of

sagas, and in various redactions. Chronologically they fall under two heads, the *mythical* and the *historical*; and among the historical we may again discern between the “epic historical,” written from oral tradition, treating events from bygone times, and the historical in the modern sense, or those written and recorded by contemporary writers.

The mythical period ends, and the dawn of history begins, shortly before the time of the settlement of Iceland, about the time of King Harold Fairhair and his father Halfdan the Black. Whatever is recorded to have happened before that time falls within the mythical age, extending from Odin downwards to the middle of the ninth century. The two centuries next following make up what may be called the Saga age, the time of the early historic sagas, marked by two great events—the settlement of Iceland, the Orkneys, the Faroes, and a century later by the introduction of Christianity. Then comes the purely historical time, when events and writing run parallel.

The Lives of the Kings may be divided thus. The mythical age is comprehended in the brief *Ynglinga Saga*, containing a pedigree of kings from Odin, accompanied by brief notes on each king, his death, his cairn, intermingled with various interesting mythical anecdotes. The historical series of kings then begins with King Harold Fairhair and his father Halfdan the Black. In the ancient works and MSS. we may divide this series into three parts: (1) *The Life of King Harold*, the ancestor of all future Norse kings, with the lives of his sons and nearest successors, kings and earls, within the heathen age, including the end of the ninth and the whole of the tenth century; these sagas only exist in an abbreviated form. (2) Then follow the *Lives of the two Olaves* (*Olafanna Sögur*), King Olave Tryggvason and St. Olave, *Olaf-saga-Tryggvasonar* (995–1000) and *Olaf-saga-Helga* (1014–1030). These two kings were the champions of the Christian faith, much celebrated in song and story, and of each there exists accordingly an elaborate historical account. (3) Lives of the following kings: Magnus the Good and Harold Hardrada, and his successors down to King Sverri, including about 150 years (1030–1180); King Harold is the last in the list whose life still bears the mark of the epic and early saga style, although his time borders close on the age of writing, for the first Icelandic historian, Ari (see *Academy*, vol. i. p. 278), was born only a year after his death, and this historian, Ari, was the very man who, among other works, laid the foundation of the Lives of the kings of Norway, in a work variously called *Konunga Áæfi*, *Konungabók*, or *Konunga Sögur*. Among the kings of the twelfth century there was no eminent man, and their sagas are accordingly devoid of much interest until the appearance of King Sverri, 1177–1202, of whom there exists a separate saga, a highly interesting and well written history (*Sverris Saga*); the saga of his grandson, King Hakon († 1263); his son was King Magnus the Law-minder († 1281), whose life (now lost, with the exception of a fragment) is the last saga written by an Icelandic sagaman on a Norse king. Thus counting from Harold Fairhair, we have an unbroken series of above 400 years, a period almost exactly coinciding with the existence of the Icelandic commonwealth.

Now, as to the work commonly called *Heimskringla* (the name is modern, taken from the beginning words “Kringla heimsins,” the *Circle of the world*); this work contains a recension of the Lives of the kings of Norway down to King Sverri; first comes a preface, including a brief record of Ari, the historian, whose book formed the groundwork; then the series of the sagas themselves, beginning with the *Ynglinga Saga*, the *Heimskringla* being the only recension that has preserved that saga to us; for all the other recensions begin with King Harold Fairhair (the *Fagrskinna*,

with his father Halfdan the Black). The Lives of King Harold and the next following kings, King Hakon (the foster-son of King Athelstan), and the sons of Gunhild, are here given in a fuller and better form than elsewhere. It is succeeded by the saga of Olave Tryggvason, much abbreviated in shape as compared with the large *Olafs Saga* contained in the Arna-Magn. vellum, folio 61, and published in *Fornmanna Sögur I.–III.*, as also in *Flatayarbók*; yet the abridgment is done with a careful hand, evidently by a historian, not, as is the case in some of the following, by a mere abridging, unskilled transcriber. The *Olafs Saga Helga* (St. Olave) conforms in the main to the special saga of that king, published in *Fornmanna Sögur IV.* and *V.*, but especially it agrees closely with the text in the edition of 1853 from an old Icelandic vellum in Stockholm. The sagas of the following kings are given in an abridged text, and mostly by an unskillful hand, especially in the sagas of the kings of the twelfth century; and we may add that the texts of the various MSS. of *Heimskringla* vary here among themselves, transposing, adding, and omitting, so as to produce an almost hopeless confusion. The best and fullest text of all these sagas from Harold Hardrada downwards to Sverri, is contained in another ancient Icelandic vellum called *Hulda* (Arna-Magn. folio 66), and published in the sixth and seventh volume of the *Fornmanna Sögur*. The *Heimskringla* ends abruptly in the year 1176; but only in a single MS., the parent of our vulgate text; for the other vellums run on, and also give an abridgment of the *Sverris Saga*, as well as of the *Hákonar Saga*, down to 1263, some comprehending but one, some both those sagas.

The author of this work is in the editions and in all later writings said to be Snorri Sturlasson, born 1178, died 1241, the famous writer of the *Edda*; but curiously enough, neither the MSS. nor the tradition attest this; the only vellum that says anything about the matter is the *Cod. Fris.*, which begins thus: “here beginneth the Book of Kings according to the records of Ari, priest, the Historian.” The first mention of Snorri, as compiler of the *Heimskringla*, occurs in a Danish (or Norse) translation of it by a certain Lauriz Hansson of 1550 (Arna-Magn. 93, and autograph); he says: “as it is recorded in the preface of Snorri Sturlis (*sic*), the Norse historiographer;” and “here endeth the preface of Snorri Sturlesenn in the Book of Kings.” This statement was repeated in a later translation by the Norwegian priest Clausen (1599), whose translation was published by Ole Worm (a Dane) in 1630. The most learned Icelandic scholar of that time, Arngrim the Learned, was himself unaware of the fact, for in a letter to Ole Worm of 1632 (Aug. 18), he says: “quod ad Snorronem nostrum, an vestrum potius, quibus lucem et se ipsum profundâ oblivionis nocte debeat;” “as to our Snorri, or rather your Snorri, for to you (the Danes, not to us Icelanders) he owes both the light and the deliverance of himself out of a deep night of forgetfulness.” The fact appears nevertheless to be substantially true. If not the *Heimskringla* in its present shape, yet the *Life of St. Olave*, as it stands in the edition of 1853, is the work of Snorri; his authority is once quoted in regard to the battle of Swolder (where Olave Tryggvason fell), and the reference quoted agrees with the text in our *Heimskringla*. Graver doubts may exist as to his authorship of the last part, namely, the sagas of Harold Hardrada and the rest; if he ever was the composer of those sagas, his work would be more likely to be the text of the *Hulda* (our best text), and not the badly compiled abridgment which is given in our texts of the *Heimskringla*.

But Snorri was not the original compiler of these records; neither could he have been, for at his time the tradition of events that had happened in the tenth century had greatly,

if not altogether, faded away in Iceland. But there were other sources :—

I. The *Book of Kings*, or *Lives of Kings*, by Ari, a book which appears to have existed as a separate work, but was at a later time inserted (abridged ?) into his *Islendinga Bók* (see *Academy*, I. c.) ; this Book of Kings is lost, but we can often penetrate to it and perceive it through the veil of the works of later historians ; in the chronology, and chiefly in the choice records as to heathen rites, sacrifices, customs, and manners ; in the genealogies, which we owe to Ari's authority ; &c.

II. The next sources were the old poems (war-songs), but however rich in words and circumlocution, they were but poor in facts.

III. The large collection of episodes and sagas of Icelanders who had lived in Norway in the times of the respective kings, received honours there, and now that they returned, the incidents of their lives were handed down shaped into a little tale ; those episodes the Icelanders call "thætter" (twists of rope), distinguishing them from the longer sagas ; they were told and re-told at festivals, meetings, banquets, weddings, at the evening winter-hearth, and at length written down. A large collection of such episodes, rich and varied in scenes and characters, is embodied into the Sagas of the Kings (thirty, forty, or upwards), and forming sometimes the choicest part of the narrative. The saga of Harold Hardrada, e.g. and that of Olave Tryggvason, are for a great part made up of these small stories, which inform us, not of the king's public life and career, nor even of his dealings with his subjects in Norway, but of his audiences and intercourse with the Icelandic visitors in Norway (e.g. the *Tale of Stuf the Blind* in the saga of King Harold).

IV. As to the *Lives of the Kings* next preceding Sverri, there was a work written by an Icelander, Erik Oddson ; that book was called *Hryggjar-Stykke*, a record, mostly authentic, of the events in Norway immediately after 1130 ; this work is lost, but it is the groundwork of the complete saga as found in the *Hulda* and in the *Morkinskinna*.

Most of the ancient vellum MSS. of the *Heimskringla* were preserved in the old University Library at Copenhagen, and were consequently all destroyed, together with the library, in the great fire of 1728. These vellums were :—
1. The *Kringla* (also called *Cod. Acad. Primus*). This famous vellum is the foundation for all the editions (with one exception), and it has given the name to the book itself. It was nearly a complete copy, only the first leaf with the preface was wanting, and the corresponding leaf, the eighth and last in the quire ; it therefore began with the first chapter of the *Ynglinga Saga*, where the words "Kringla" or "Kringla heimsins," from which the name is derived, occur in the first sentence. This vellum seems to have been written in the year 1266. 2. The next vellum was by Torfaeus called *Jöfraskinna* (*Membrana Regum*), also called *Cod. Acad. Secundus* ; it did not end as the former MS., but ran on into *Sverris Saga*, the end being wanting. 3. The third was by Torfaeus called *Gullinskinna* (*Golden-skin*), *Membrana Aurea*, from the brilliancy of its writing and parchment ; it only contained the latter part, beginning with the life of King Olave the Quiet (1067–1093), and ran on through *Sverris Saga* and *Hákonar Saga*, where it ended, being defective. Although these vellums were destroyed, they have been preserved in a transcript by the well-known vellum-transcriber, Asgeir Jónsson. The learned Icelandic historian Thormod Torfaeus was at the end of the seventeenth century engaged by the king of Denmark to compile the *Historia Norwagiae*, the *Series Regum Daniae*, the *Winlandia*, the *Orcades*, &c., until

in consequence of an unlucky accident (a manslaughter), for which see *Hist. Ecc. Isl.* iii. 570, 571, Torfaeus fell into disgrace with the king, who exiled him to Norway, to the island Karmten, in Bergen-Stift ; here he lived during the remainder of his long life for about fifty years, far off from the vellums in Copenhagen. He therefore had all these vellums copied by Asgeir, the Icelandic vellums of the Royal Library as well as those of the University Library ; the Arna-Magn. Library did not yet exist. Among other things all the vellums of the *Heimskringla* were copied, precious fragments of the *Orkneyinga Saga*, and much besides ; and a happy accident it proved to be, for when in 1728 the library with the originals was consumed by fire, these accurate transcripts were preserved, all in the possession of Árni Magnússon, who had bought them at the death of Torfaeus in 1719. The transcript of the *Kringla* is contained in three volumes (Arna-Magn. 35, 36, and 63), and that of the *Jöfraskinna* in Arna-Magn. folio 37. The first edition of the work, published in Sweden in 1697, before the fire, is founded throughout on the *Kringla*, but not so the folio edition of 1777–1783 and its later reprints, of which the third part is founded not only on a different MS. but even on a different recension ; and for this reason :—In making the catalogue of the Arna-Magnaean MSS. (in 1731), the third and last volume of Asgeir's transcript had by inadvertency been separated from the rest, and placed under No. 63. This circumstance was unknown to the editor, and it was noticed by the present writer when ten years ago the collection was removed from its old place in the Round Tower into the New Library building at Copenhagen. The present edition is throughout founded on the same MSS. (Arna-Magn. 34, 35, 63), and is consequently the first real true edition of the work presenting oneness in the text.

The present edition originated thus. It was originally intended to be edited by the late Prof. P. A. Munch ; but at his lamented decease in 1863, the work, which seems not even to have been begun, was transferred to the present editor. It is a commendable work in every respect, especially in the philological parts, in which the editor has endeavoured to give the chief peculiarities of the spelling of the *Kringla* : e.g. the double use of the ö (ø and œ), answering to the double sound of that vowel. The transcripts of Asgeir are accurate in the text and meaning, but seldom in spelling ; but some few pieces exist in Árni Magnússon's own handwriting, and he was the most accurate man both in text and in spelling. We may here add a fact which has escaped Prof. Unger, viz. that besides those pieces which Prof. Unger has given in the preface as existing in Árni's hand, there also exists a fuller evidence as to the spelling of this old vellum. The *Kringla* wound up with a "List of Poets" (*Skálðatal*), following the series of the kings, and adding in parallel columns the names of those poets (skalds) who composed songs on each of the kings ; this last part of the *Kringla* is preserved in a separate transcript executed by Árni himself (Arna-Magn. No. 761, qto.), and is printed (but not yet published) in the third volume of the Arna-Magn. edition of the *Edda*, pp. 251–269, following letter for letter the spelling of the old vellum. By the aid of this List we are also enabled to fix the age of the MSS. ; for it has the name of King Hakon, with Sturla the Lawman as his poet ; this poem was composed in 1264 or in 1265, shortly after the king's death. The List, on the other hand, omits the name of King Magnús, his son, on whom the same poet composed many songs, for which he received honours, as stated in *Sturlunga Saga*, iii. 306.

Prof. Unger's preface gives a good account of older editions, especially that of Peringsköld, and of the way in which

modern pieces and additions from other sagas have crept into the text. All this is now weeded out, and the book is a handsome edition ; at the end there are indices of names—of proper names and of local names—all done in a satisfactory and unpretentious way. GUDBRAND VIGFUSSON.

DRACO NORMANNICUS.

I AM not aware whether the periodicals have at all noticed the recent rediscovery of a document by no means unimportant for the medieval history of England, but appearing to have been lost for a number of years.

Montfaucon (*Bibliotheca Bibliothecarum Manuscriptorum nova*, i. 41, 1739) was the first who mentioned as the contents of MS. Reg. Christ. 1267 : "Anonymi *Draco Normannicus*, versus continent historiam Mathildis Imperatoris Francorum Anglorum et Normannorum, quaedam ibi habentur de synodis sub Victore et Alexandro III." Afterwards J. J. Brial, well acquainted with this notice, printed from a volume of abstracts of MSS. belonging to the queen of Sweden, which he found in the library of St.-Germain-dès-Prés, part of the introduction in verse, as well as the prose headings to the several books and chapters of the work, in *Notices et Extraits des Manuscrits de la Bibliothèque du Roi*, viii. 2, 297, 1810. He asserted at the time that, when he enquired for the MS. in the Vatican through the academician, M. La Porte du Theil, and Cardinal Dugnani, late papal nuncio in France, the book was not to be found. Brial is of opinion that Stephen of Rouen, a monk of the abbey of Bec in the twelfth century, was probably the author of *Draco Normannicus*, a poet of whom verses in a similar style are preserved in a MS. of St.-Germain, and about whom there is an article in the *Histoire littéraire de France*, xii. 675. Brial's extracts and conjectures concerning the authorship are repeated by Sir Thomas Duffus Hardy, *Descriptive Catalogue of Materials relating to the History of Great Britain and Ireland*, ii. 297, 1865.* It appears that the MS. was not forthcoming when the late Record Commission sent emissaries to the continental libraries, though I happen to know that Dr. Pertz much about the same time obtained a copy with the purpose of printing it in the *Monumenta Historiae Germanica*. At length it turns up again in print, and at a place where not every sharp-sighted enquirer would readily look for it, viz. in *Appendix ad Opera edita ab Angelo Mai S. R. E. Presbytero Cardinali continens quaedam Scriptorum veterum Poetica, Historica, Philologica ex codicibus collecta*. Romae apud Josephum Spithoever M.DCCC.LXXI. 4°. As the editor, Joseph Cozza, Monachus Basilianus, is altogether silent about the long disappearance of the volume, one can only guess that Cardinal Mai, who died in 1854, kept it a good long time by himself. And nobody thought of it until sixteen years after his death it is published, together with some other of his transcripts, in the same slovenly manner by which the learned men of the Vatican have latterly distinguished themselves. In a few scanty words, not altogether free from suspicion (p. 20), the reader is informed that the poem after all did not belong to the collection of Queen Christina, but that, after some vicissitudes, it is preserved in an Ottobonian MS., viz. Vat. 3081. Moreover, it turns out to be a paper copy, and consequently neither very old nor the original of an author of the twelfth century. There is, however, a notice at the end (p. 65 of the edition), saying, "Libellum istum sumpsi ex quadam perno" (= *parvo*, says the editor) "antiquo libro, quem mihi concessit R. M. R. B. Et erat ille liber ut credo de Ab. de B. H." (Bec-Hellouin?). Not a word is added about the age of the handwriting or the paper. The work contains in print 4346 verses, exclusive of three gaps after v. 1439, v. 1629, and v. 3007, in each of which places a leaf equal to a hundred verses has been torn away. The editor, who has added a few flimsy notes mixed up with the glosses which are written on the margin of the MS., is also to be blamed for having suppressed the opening of the Prooemium under the pretence : "quia nihil historicum, nihil non vulgare habebat" (p. 21). He consequently begins with the same words as Brial's extracts : "Dum moror in studiis," &c. Lastly, he has arbitrarily distributed the prose

headings or titles, which in the MS. stand by themselves over the whole poem, inserting them wherever he thought fit.

In spite, however, of the late date of the MS. and the bad editorship, a careful perusal must convince every scholar that he has not to deal with a supposititious forgery, but unquestionably with a composition of the twelfth century. Though distichs were not frequently selected for an historical poem, the imitation of Ovid is not altogether unusual in medieval historiography. I may refer to Ermoldus Nigellus and his contemporary work : *In honorem Hludowici Christianissimi Caesaris Augusti* (Louis le Débonnaire), printed in Pertz, *Scriptores*, ii. 467 ; and in every respect much nearer the Norman poet, to the *Carmen de bello Hastingsi*, by Guido of Amiens, supposed to be nearly contemporary with the event, and printed for the first time in *Monumenta Historica Britannica*, i. 856. There is not much to be said for our author's talent as a writer of verse. Like all writers of Latin verse in Gaul since the days of Venantius Fortunatus, he is fond of an accumulation of epithetic terms and synonymous verbs, which adds neither to poetical nor metrical correctness and beauty, e.g. v. 231 :

"Sublimes, humiles, fortes, castos, sapientes
Obruit, extinguit, comprimit, arcit, habet."

For the sake of his verse, he sins occasionally against grammar and syntax. There is little of the poet in him, but decidedly more inclination to reason about historical facts and their connection. He makes his heroes, Pope Stephen III., William the Conqueror, King Henry II., and others, deliver long speeches on given occasions.

The chronological arrangement of the work, evidently written in honour of the empress Matilda and her son, King Henry II. of England, is rather involved and full of episodes. Happily the author adheres in this respect to the programme which he has prefixed in the introductory verses. After having mentioned the two marriages of the lady, first to the emperor Henry V., a connection about which nothing new is said, and afterwards to Count Geoffrey of Anjou, as well as the accession of Henry II. in Normandy and in England, he proceeds to the early history of the Normans, calling them most unusually from Hastings' invasion and Rollo's occupation down to his own days almost exclusively *Dani*. After a short survey of the growth of the duchy of Normandy during the time of the last Carolingian and the first Capetian kings, we have the conquest of England by William, of course in a spirit inimical to Harold and the English. Here unfortunately we miss, owing to the first break, what the author wrote about the latter days of the Conqueror, his son William Rufus, and the beginning of Henry I. down to the battle of Tinchebrai, 1106. Farther on, at the opening of the second book, when the author returns to the coronation of Henry II. in 1154, he enters on another digression. After describing the last Merovingian king in his degraded and empty state, v. 1782 :

"Intonsus barba residens, cum crine refuso
Hac in parte sui scoticus esse cupit."

he treats of the coronation of Pippin and Charles by Pope Stephen III., and of the empire of the great Charles, very much as was to be expected in the twelfth century, and from a native of the west of Europe. See v. 2026 :

"Cum sibi subjectis servit Maguncia, Roma,
Parisius, triplicem sic regit ille thronum."

After this the feuds between Henry II. and Louis VII. in 1167 and 1168, especially the capture of Chaumont-en-Beauvaisis are narrated with several digressions. We have first the invasion of Normandy by Otto I. (946), unfortunately mutilated by another break in the text, and then suggested by the marriage of Henry's second son Geoffrey to the daughter of Conan of Brittany, the fabulous correspondence between King Arthur, "qui tunc apud Antipodes degebat," prohibiting King Henry to annex the land of the Britons. The third book opens with the death of the empress Maud, on the 10th September 1167, and her interment in the abbey of Bec ; after which the narrative is taken back again to the embassy sent by the emperor Frederick I. (1165), the betrothal of Henry the Lion, duke of Saxony, to the daughter of King Henry, and the papal schism between Alexander III. and Victor IV. (1159). Even the letters of the two pontiffs and the reports of their opposite councils, involving a succinct synopsis of imperial policy from Caesar down to Barbarossa, are turned

* See also Wattenbach, *Deutschlands Geschichtsquellen im Mittelalter*, p. 360, No. 2, 2nd ed. 1866 ; and Potthast, *Bibliotheca Historica medii aevi*, Supplement, p. 66, 1868.

into distichs. The author deduces his arguments against the superiority of the king of France over Henry II. from the fact that the ancestors of Louis were not the legitimate heirs of Charles the Great. He rejoices in all successes of the Angevin king over his feudal lord; see v. 1746:

"Conclusus triplici Gallos tenet ipse ducatu."

But much more important than such reasoning is the character given to Archbishop Thomas of Canterbury, formerly the intimate friend of the English king, but now a fugitive in France. To the great disgust of the ultramontane editor, Becket is treated, indeed, very unfairly, as it could not be otherwise expected from such a decided partisan of the king. He is introduced for the first time on the occasion of the discord between the two kings, v. 2060:

"Exul abest Thomas antistes Cantuariensis,
Foedera perturbat, proelia sola cupit."

Afterwards he is accused of having gained the favour of Pope Alexander by bribery, v. 3839, and with regard to the debates at the Council of Tours (1163), of which there is a long description, we have the very curious hint, v. 3933:

"Hic siluit Thomas antistes Cantuariensis
Ut minus doctus verba latina loqui."

Towards the end of the poem there is mentioned a truce between the two kings, at Poissy, in February 1168 according to the heading, iii. 16, but in the Epiphany 1169 according to Robert of Thoringny. Here the author alludes once more to the uncertain position of the conspiring archbishop, v. 4333:

"Reddere iura sibi si dedignatur avita,
Exul ab Angligenis iure perhemnis erit";

and v. 4344:

"Nescio quid voluit, retro redire timet,"

perhaps the best evidence of the conclusion of the poem before Becket's death. The latest fact of which there is a record in the poem seems to be the visit of Henry the younger to Paris, v. 4245, which is dated by Robert de Thoringny 1169, in *Purificatione Beatae Mariae* (Pertz, *Scriptores*, vi. 518).

At the end of the poem, however (p. 65), are added from the same MS., and therefore indirectly from the same original, two lists of the jewels and ornaments bequeathed by the empress Maud to the church of Bec in her lifetime and after her death, and thirty-three distichs more, evidently in continuation of the poem, describing the return of the king to England in a gale, by which no other passage can be meant than that described and dated the 3rd March 1170 in *Gesta Henrici Secundi Benedicti Abbatis*, i. 3, ed. Stubbs.

That the work is the composition of a contemporary appears likewise from the description of Denmark, a country still pre-eminently known to an inhabitant of the lower Seine, v. 524, from the term *Metropolis Londis* (Lund), and from v. 536:

"Waldamarus ibi regia scepta regit."

The author is fully alive to the recent importance of canon law, v. 1492:

"Hinc fluvius torrens Gratianus ad alta redundat,
Quo sine nil leges, nil ibi iura valent."

That he was a Norman, proud of his distinct nationality, is evident throughout the poem. The courtier may be discovered in v. 1732, where he insinuates too much consanguinity as the only reason of the divorce between Louis VII. and Eleonora of Poitou. That Bec is the local centre from which he writes is apparent from the vigour by which the church and castle of Poissy (Pissenum) are claimed by the abbey as its property (v. 1678), and more especially from the circumstantial description of the individual monk of Bec, who was despatched to inform the king of the death of his mother the empress (v. 2910):—

"Is regi notus tum carus tumque fidelis
Hinc magis est iteris (sic!) dulcior ipse labor," &c.

It strikes me as if this must have been the poet himself, Stephen of Rouen, provided that the authors of the *Histoire littéraire de France* and Brial have come to the right conclusion. As for the title *Draco Normannicus*, the editor does not even hint whether it is actually prefixed to the work in MS. Its meaning can be no other than *vexillum*, the Norman standard.

It is not very easy to trace minutely all the sources from

which our author collected his knowledge of previous history. In the opening of the poem (v. 2), he professes magnificently:

"Ex propriis garis edere pauca libert."

Referring to the British king Arthur (vv. 2803, 2804), he quotes "liber Gildae sapientis" and "quae Monemutensis vera loquendo canit." The description of Childeric III., the last Merovingian (v. 1762), agrees more in spirit than literally with the well-known first chapter of Einhart's *Vita Karoli Magni*. The author knew of course his more provincial historians, especially Dudo of St.-Quentin, who is quoted by name in the title (ii. 13) referring to the siege of Rouen by Otto I.: "Dudo ponit quod hoc fuit supra pontem portae Beluacensis;" cf. Duchesne, *Hist. Norm. Scriptores*, 131. He had some annalist at his disposal, and most likely the *Chronicles of Sigibert of Gembloux* and his continuators. The best of these, Robert de Thoringny, had been himself a monk at Bec from 1128 till 1154. On the other hand, Wace's *Roman de Rou* was probably not yet published, whereas the monk of Bec, who had very little poetical fervour in common with the *trouvere* from Jersey, must have been acquainted, as I have very little doubt, with at least the *Gesta Pontificum* of William of Malmesbury, from the way in which he mentions (v. 3957) the synod of Winchester in 1072, at which, in the presence of William the Conqueror, the quarrel between Lanfranc and Thomas of York was decided in favour of the first. Though the latest dates in the work are 1169 and 1170, and not February 1168, as Brial supposes (*l. c. p. 298*), I find no traces that the author wrote with a knowledge of Becket's letters, which were hardly collected yet. He relates what he either saw himself or heard from those who did. There are many more or less local details, however, which require more minute investigation both from Norman and English scholars, before a final verdict can be given about the historical value of *Draco Normannicus*.

R. PAULI.

Intelligence.

We are in a position to say that M. Renan's *L'Antichrist* may be expected in the early part of next year. The previous statement in our columns on this subject was inexact.

"Etruscan Inscriptions, analysed, translated, and commented upon," by Lord Lindsay, is one of the books in Mr. Murray's list of works in preparation.

The first part of the long promised *Historical Atlas of Ancient Geography, Biblical and Classical*, compiled under the superintendence of Dr. W. Smith and Mr. G. Grove, is announced to appear in October. The work (which will be completed in five quarterly parts, price one guinea each) is to contain 41 maps of the size of those in Keith Johnston's *Royal Atlas*, together with descriptive letter-press and an account of the authorities used in constructing each map. The classical maps have been prepared by Karl Müller, the well-known editor of Strabo and the minor Greek geographers.

M. Taine is at present engaged on a History of the French Revolution.

The publication of Mr. Buckle's Miscellaneous and Posthumous Works, which were announced for the present season, is postponed till October.

A writer in *Fraser* (August) is disposed by fresh manuscript and other authorities to give full credence to the story of Olimpia Maldachini, sister-in-law and sovereign ruler of Pope Innocent X., as commonly told in the seventeenth century, though it was treated by Ranke as a mere romance. The life of this lady, which has been usually ascribed to Gregorio Leti, may, according to the writer, be of more trustworthy authorship.

According to *La Voix*, the autograph MS. of the memoirs of A. Khrapovitsky, Secretary of State to Catherine II., has been found amongst the papers of Prince Peter Vrazemsky. The two published editions are incomplete, and it is hoped that the original text of the work, which throws so much light on the private life of the empress, will now be restored.

SS. Tanfani, Paganini, and Lupi, of the archives of Pisa, are preparing to publish, by instalments, in 4to, *Le Iscrizioni della città di Pisa, raccolte ed illustrate*, with notes and facsimiles when desirable.

Contents of the Journals.

Göttingen, June 5.—Reviews Gaston Paris' edition of *La Vie de saint Alexis*, a poem perhaps written by Tetbald of Vernon at Rouen in the eleventh century in assonant five-line strophes, which later hands

have changed first into the rhymed verses which the thirteenth century preferred, and then into four-line Alexandrines. The historical value of the poem is therefore great, and it gives us more insight into the old French dialects in some respects than even the Oxford "Roland," also of the eleventh century.—There is also a notice of Monod's book, *On the Sources of Merovingian History*; and Ewald refers to Wright's *Syriac Apocryphal Acts of the Apostles*, as illustrating the use of the word συμφωνία for a musical instrument in the Book of Daniel.—June 12.—Contains good criticisms of Stamm's and Heyne's edition of Ulfilas; and of Waddington's *Inscriptions grecques et latines de la Syrie*.—June 19.—Analyses Clouet's *Histoire de Verdun*, vol. ii., at length; and Kohl characterizes Cunningham's *Notes on the Natural History of the Strait of Magellan* as being unsatisfactory.—June 26.—Reviews Köpke's interesting *Kleine Schriften*.—Kohl takes an unfavourable view of Neill's *English Colonization of America during the Seventeenth Century*.

Liter. Centralblatt, April 27.—Notices Friedrich's *The Diet of Worms in 1521*, from the letters of the Nuncio Oleander. Friedrich (Döllinger's ally) found a copy of some of these at Trent; the originals at Rome are of course not accessible. He last year published Turrecremata's *De Potestate Papae et Concilii Generalis* from the Munich library.—May 4.—Analyses Ritter's examination of Sully's *Memoirs*, especially as to Henri IV.'s great plan of overthrowing the House of Hapsburg, and establishing a European peace; which Ritter shows to be unhistoric, and falsely attributed to the king either by Sully or Sully's secretaries.—A good summary follows of von Sybel's fourth volume of the *History of the French Revolution* (to 1797).—June 29.—Notices Max Müller's *Über die Resultate der Sprachwissenschaft*, as containing a corrective of Mommsen's views as to a "Graeco-Italian race," and of similar views in Schleicher and others.—Lugebil on the *Constitution of Athens* and Mommsen on the *Römisches Staatsrecht* are reviewed at length, the former with special reference to the archonship, the latter as to the tribunate.

Bullettino dell' Instituto, June, continues its account of the excavations at Pompeii and at Certosa. The latter show the rudeness of Etruscan art in the north as compared with what it was near the coast: some objects found at Eysenbilsen in Belgium prove how far Etruscan trade extended before the rise of Rome.—July and August.—Continues the account of the excavations at Pompeii and Certosa. The objects found at the latter illustrate the religion of North Etruria; nothing has been discovered that in the least reminds us of those ghastly beings of the nether world so often depicted in the vases and tombs of the southern region of Tuscany. An attempt is made to range the discoveries in their chronological order and progress.

Periodico di Numismatica e Stagiistica per la Storia d'Italia, Firenze, anno iv. fasc. ii., contains notices and a plate of the early coins of Camerino in the thirteenth century, with the name of Bishop Ansarius (a German name) on them, the bishops then having great temporal power. A list follows of the officials of the hospital at Altaspasio, with a plate of six unedited seals. An article on the "vermillion cross on a white ground," the arms of Florence, given to the knights specially created by the people, contains a curious list of the knights appointed in the famous outbreak of the Ciompi in 1378, "Mess Salvestro" (de' Medici) heading the list.

New Publications.

DE LUYNES, Duc. Voyage d'exploration à la Mer morte, à Palmyre, à Pétra et sur la rive gauche du Jourdain. Oeuvre posthume, publié par ses petits-fils, sous la direction de M. le comte de Vogüé. 4 vols. quarto et 3 atlas in fol. (Vol. 1 et 2 : La relation du voyage laissée entièrement, manuscrite par le duc de Luynes, des recherches géographiques, historiques et archéologiques. Vol. 3 : Un mémoire de M. Vignes sur la topographie etc., le journal de voyage à Karak et à Chabak, suivis d'inscriptions arabes, traduites par M. Sauvaire. Vol. 4 : La géologie, la minéralogie etc., réd. par M. Lartet.) Paris : A. Bertrand. (Trübner.)

REGISTRA QUORUNDAM ABBATUM Monasterii S. Albani qui saeculo 15^{mo} flouerent ; vol. I. Registrum Abbatae Johannis Whethamstede, Abbatis Monasterii S^e Albani, iterum susceptae ; Roberto Blakeney, Capellano quondam adscriptum. Edited by H. T. Riley, M.A. (Rolls Series.) Longmans.

SCRIPTORES RERUM GERMANICARUM in usum scholarum ex monumentis Germaniae historicis recudi fecit G. H. Pertz. Godifredi Viterbiensis festa Friderici I. et Henrici VI. imperatorum metrice scripta, ex ed. Waitzii. Hannover : Hahn.

UBICINI, A. Les Constitutions de l'Europe orientale. Constitution de la Principauté de Serbie annotée et expliquée. Paris : Durand et Pedone-Lauriel.

Philology.

Prophetæ Chaldaice. Paulus de Lagarde e fide cod. Reuchliniani edidit. Lipsiae in aed. B. G. Teubneri.

HITHERTO anyone who has wished to use an authentic text of the Targums has been obliged to consult the rare editions published in the first century after the invention of printing. These were printed by Jews or Jewish Christians, partly in Portugal and Spain: as in Lisbon (1491—Onkelos), in Leiria (1492—the Proverbs; 1494—the Prophets), and in Alcalá (1517—Bible); partly in Italy: as in Bologna (1482—Onkelos), in Venice (where Daniel Bomberg, of Antwerp, established his celebrated press, and published, from 1518, the three large editions of the Bible, together with the Targums), in Sabbioneta (1557—Onkelos, with Massorah), and in other places. These editions were based upon the MSS. The later ones in common use among Christian scholars reproduced the editions of Alcalá and Venice, but unfortunately not without alterations.

After Elias Levita had advised the forming a Chaldee grammar for the Targums from the Aramaic text in Daniel and Ezra to the neglect of the MSS. (see preface to his *Dictionary*, 1541), a tendency arose not only to correct the vowel system of the old editions, but also, on the pretext of their superfluity, to diminish the use of the *matres lectionis*. This was done by Le Mercier in his edition of the Targum of the Minor Prophets and some Megilloth (1557, preface), and also by the elder Buxtorf in his Rabbinic Bible, on which the Targum texts in the later polyglots were based.

Very little was done in editing Targums by Christian scholars of the succeeding centuries, but the following editions—all from MSS.—should be noticed: Taylor (two Targ. of Esther, 1655), Terentius (Job, 1663), Beck (1680 and 1683, Chronicles), Wilkins (1715, Chronicles). The last edition of a Targum was that of J. D. Michaelis, who in 1775 reprinted the Targum of Hosea, edited by van der Hardt in 1702. There were of course several Jewish reprints, on which v. Steinschneider, *Zeitsch. d. Deutsch. Morg. Ges.* xii. 171, and cf. Frankel, *Zu d. Targ. d. Proph.* p. 40, note.

It was only on October 1, 1857, at a general meeting of the German Oriental Society held at Breslau, that it was resolved, on the motion of Prof. Brockhaus, of Leipzig, to promote and support a critical edition of all the Targums (*Z. D. M. G.* xii. 195, 199; xiii. 320), but this resolution was never carried out.

Semitic philologists will under these circumstances share our great joy at seeing that Prof. de Lagarde has broken the ice, though we regret to add that this has not been done without personal sacrifice, for he has once more had to defray the whole cost of printing. In the hope of giving a solid basis to the grammatical study of the Targums, he chose the oldest extant MS., viz. the Codex Durlacensis (A.D. 1105), which contains the Nebhiim of the Jewish Canon in Hebrew, with the Targum wrongly ascribed to Jonathan bar Uzziel. It was bought at Rome by Reuchlin in 1498, and was used by P. J. Bruns, who collated parts of the Hebrew text for Kennicott's Bible (cf. also Eichhorn's *Repertorium*, xv. 174). From this codex we have here a most exact copy of the consonant text of the Targum. In the very rare cases where the MS. has lacunæ they are filled up from Bomberg's first edition of 1518. The editor was not in a position to add the vowel-points of the MS., as this would have considerably increased the expense. But this omission is not to be greatly regretted, for the reconstruction of the probable pronunciation of Aramaic words depends chiefly, we think, upon etymologic reasons under the guidance of the *matres lectionis*, which are of course

left untouched. We fear that an investigation of the vowel system of the Reuchlin MS., for which the editor seems disposed to make further sacrifices (p. iv), however useful it may be, would have only a negative result. It would probably show that the punctators of the Targums did not follow a tradition of any great age or authenticity, but merely fixed a very late pronunciation which had already become arbitrary and corrupt. Must we not indeed infer the absence of points from the use of a double ' or ' to express the consonant sounds, while for the vowels we have the single *matres lectionis*? Besides, Elias Levita maintains that the Masorites paid no attention to the vocalisation of the Targums, and expressly states that the very old MSS. which he saw had no vowel-points at all. We must perhaps admit one exception, in the case of the vocalisation hinted at in the Massorah of Targum Onkelos, but this was fixed by the Madinchāē, and seems to depend upon the actual pronunciation of the Eastern Jews as influenced by Syriasm (v. Geiger, *Z. D. M. G.* xviii. 649, 657).

After the text of the Targum itself (pp. 1-489) there follow (pp. 490, 3-493, 32) from the same MS. the Reshū-jōth or Harmōnin ("licences"), i.e. introductions in which the Turgemān asks leave of God and the congregation in the synagogue for reciting the Haftarah. Nos. 1, 2, and 5 are the most interesting: 1 and 5 rhymed; 2 an acrostic; 1 and 5 alphabetic, and followed by an acrostic of the name of the Paitān (cf. Prof. de Lagarde's conjecture on Ps. xxv. and xxxiv., *Academy*, vol. iii. p. 12). No. 6, which is in prose, praises Jonathan bar Uzziel as a disciple of Haggai, Zechariah, and Malachi. No. 7 and 8 contain the liturgical blessings of God after finishing the Haftarah. (On all this v. Zunz, *Gottesdiensliche Vorträge*, pp. 380 a, b, and 356 d, and *Literaturgeschichte der synagogalen Poesie*, 1865, pp. 19 and 79 c.)

Besides a detailed description of the Reuchlin MS., the comprehensive preface contains (pp. vi-xlii) the whole of the marginal notes to the Targum, which are of great importance. They consist of fragments of different Targums to many passages, and are often of considerable extent. The longer ones are marked (1) "Jerusalem Targum," (2) "Other Targum," (3) "Other Book," or (4) the two latter notes are combined (v. pp. xii, 17; xxxiv, 20; xxxviii, 19). The shorter ones and those which refer to single words are marked "Different" and "Other Expression."

Now classes 1, 2, 4, to judge from their contents, all contain Jerusalem Targums, but the difference of their marks suggests that the Turgemān, who had to read the official Targum in the synagogue, used to increase the Jerusalem glosses already extant in their own copies from the margin of other copies which they happened to meet with. For "Other Book" means another MS. of the official Targum (cf. p. xv, 11, on 1 Sam. v. 11), and it is not probable that in later times they borrowed from a complete Palestine Targum of the Prophets. How little the marginal notes of the Reuchlin MS. exhaust what contemporary and later Rabbins knew of this Jerusalem Targum may be seen from the fact that quotations from it made by Rashi (who died in the very year that the codex was written), Kimchi, and others, do not exist in the MS., except one Targum of the Haftarah, Is. lxvi. 1, but this has about twenty-five words more than in the Vatican MS. (v. these quotations collected by Zunz, *Gottesdiensl. Vortr.* pp. 77, 78).

Since the language of all the Targums, as is shown by its grammatical peculiarities, is a Palestine-Aramaic dialect, we have to seek the origin of all in Palestine (v. Nöldeke, in *Gött. gel. Anz.* 1872, p. 831). The differences, lexical and other, find their explanation in the different histories of these interpretations after they were transplanted

from their native soil into Babylonia and other countries. We know also from Zunz's and Geiger's researches that among the Jerusalem interpretations of the Pentateuch—and to these the fragments first edited by Prof. de Lagarde bear a twin likeness—we possess pieces of the oldest and least refined of all Targums. To these the Aramaic versions of the Hagiographa come nearest in affinity, as has been acknowledged for centuries; while on the other hand the Targum Onkelos of the Pentateuch and Targum Jonathan of the Prophets have passed through the Babylonian schools, and have been so cleared of old exegetical additions and alterations, and so formed word for word from the Hebrew text, that even their Aramaic idiom has become but an artificial and defaced language.

The present form of the Targum of the Prophets is ascribed by the tradition of the Turgemān—wrong as to the person, but right in its conception of a Palestine origin—to Jonathan bar Uzziel. But in fact it seems to depend for the most part on the redaction of Rabbi Joseph ben Chama of Babylon (ob. 325), who laid great stress on the Targums as a source of exegetical information (v. Frankel, *Zu d. Targ. d. Proph.* p. 11, line 1). From the method of interpretation followed in this official Targum, that of the Jerusalem Targum in de Lagarde's edition is not in its essence different. The peculiarities which Frankel quotes are here again met with, but with fuller extension and licence. What there is old in them, what added at a later time, can only be decided by examining the single passages; but in many instances we have in these incoherent fragments common matter which points to an earlier cycle of legends. Cf. e.g. on Josh. xiv. 15 and xv. 13 with xxi. 11 (Gen. xxiii. 8); Josh. xv. 16 with xviii. 17; Judges v. 4 ("the dew which will resuscitate the dead of Israel") with Targ. of Ps. lxviii. 9, 10, Talmud Chagiga, 12 b (Levy's *Dict.*); Jud. xii. 8, 9, with Targ. Ruth i. 1, iv. 17: Boaz = Ibsān, cf. Mercerus' edition. Sometimes it is evident that in one gloss another is inserted, as in Jud. v. 5, where the lines p. x, 21, יְנִי xi, 12, מַכְיָן, are a second Targum.

Of course all these marginal notes contain valuable contributions to the Aramaic dictionary, but it will not be always easy to decide whether we have before us a genuine Aramaic expression or one moulded on another—as the Arabic—pattern. I should think e.g. that "meth'arkhin," *they quarrel*, is formed from the Arabic "mut'a'rakin" (v. Berggren, *Guide français-arabe vulgaire*, s. v. "battre") rather than from the Hebrew "arakh milchāmāh." Are Mohammedans meant in x. 24?

Very frequently the glosses contain several synonyms of vessels and implements having different names in different countries, e.g. Judg. iii. 22, *goad*, Jerus. (and Peshita) "mas-sāsā," cf. Arab. "minassat"; iii. 19, three terms for *leather* or *skin-bottle*; iv. 21, *hammer*, "arzapp'thā," Eastern Targ. (and Syriac), "marzapp'thā," Palestine (cf. v. 26); the Arab. has borrowed both forms, "irzabbat" and "mirzabbat"; ibid., *peg*, "d'shār," Arab. disār; vi. 19, three terms for *kettle* and two 1 Sam. ii. 14; vi. 38, *bowl*, the terms λεκάνη and *lagena*, cf. Targ. Job xxxii. 19. In like manner we have *neck-ornaments* in Judg. viii. 21, 26, and *concubine*, viii. 51. To another class belong "qibhl- = q'dhām-", p. ix, 25; three terms for *bind*, Jud. xv. 10; instead of "paggar," of the official Targum (Jud. vi. 25), we have "pakkar," which, as far as we know occurs only in the Jerusalem Targum, marked "Other Expression."

A few marginal notes refer to different vowel-points, as Judg. iv. 13, "karkē" and "k'rake"; 1 Sam. i. 6, *Pael* and *Asfel*; &c. But we may not dwell longer upon these highly important notes.

It is only for practical reasons that the editor (v. his

statement, preface, p. xlvi) calls the idiom of the Targums "Chaldaic." This name as used for "Aramaic" seems indeed older than Jerome, for Berossus uses *xaλdaīrī* for an Aramaic or at least a Semitic dialect (ed. Richter, p. 50; Euseb. *Chron.* ed. Majus, i. 11). The Palestine Jews would have said "Syriac," the Babylonian "Aramaic" (v. Nöldeke, *Zeitsch. d. Deutsch. Morg. Gesell.* xxv. 116).

Among other interesting etymologies, Prof. de Lagarde proposes (p. xlvi) to identify the Syriac "paddān" with the Persian "paitidāna"; but my honoured friend and teacher now authorises me to state that he withdraws the application of this to Paddan Aram. The latter is very probably identical with what was afterwards known as the village of Paddānā, in the neighbourhood of Charan.* This identification was expressly made by Barbahlul, who knew the village, in a MS. belonging to Dr. Socin, s. v. *Pāraṇ dārām* (sic), and long before was assumed by Ephrem in the *Carmina Nisibena*, p. 31, i., 33, ii. (v. Bickell, p. 138).

We beg to invite particular attention to what deserves a notice beyond our present space, viz. the emendations, &c. of the text of the Hebrew Bible, to which the editor devotes five pages at the close of the preface. Of these emendations fifty-eight refer to the Psalms, thirty-two to Isaiah, seventeen to Job, five to Kings, one corrects Col. ii. 16.

We must, in conclusion, not omit to note the excellent getting-up of the work, and especially the solidity and clearness of the Hebrew type, obtained by Prof. de Lagarde for the university printing-office at Göttingen. It is the more to be regretted that there was not a sufficient supply of type to provide some diacritical points. In this, as in other respects, there is still much need of additions which would render the press more worthy of the university and of such works as that now before us.

G. HOFFMANN.

Assyrian Dictionary. By Edward Norris. Part III. Williams and Norgate.

An Assyrian Grammar. By A. H. Sayce, M.A., Fellow and Tutor of Queen's College, Oxford. Trübner.

IT is with special pleasure that we notice the appearance of these two works, which are equally creditable to their authors, and hopeful omens for the young study of Assyriology. The third part of Norris' great Assyrian dictionary treats of the vocabulary from the letter M to nearly the end of N, thus comprising only two letters. The reader will see from this with what thoroughness the material has been examined. We could wish, however, that the author had limited himself more in the selection and particularly in the quotation of authorities, or had at least been more sparing in the use of cuneiform characters. We should think an exact transcription would be almost as useful for the student, since the original texts have been already lithographed in the English and French collections of inscriptions. An exception would be only necessary in quoting from an unpublished text.

Plan and mode of treatment are the same as in the two first volumes, and though (as we remarked last year in the *Academy*, vol. ii. pp. 49, 50) we should have preferred a different arrangement, it is clear that no alteration was any longer possible. We therefore heartily welcome this fresh proof of the extensive reading and unabated energy of the author, who works with an unpretentiousness which marks the great scholar, only anxious for the due exhibition of facts. We reserve the expression of our dissent with reference to certain points of detail for an intended publication of our own two Assyrian

glossaries, and we will only point out the importance of this volume for the historical study of religion, inasmuch as it includes the names of all the Assyrio-Babylonian divinities.

We now pass to the Assyrian grammar of Mr. Sayce. Like the preceding work, it makes altogether the impression of conscientious research, and is, all things considered, a valuable addition to Assyrian literature. The author himself states that it is designed especially "for comparative purposes," and we have no doubt that Semitic philologists will duly appreciate it under this aspect. A number of points of view indicated by the author are, in the highest degree, deserving of attention. The part on the formation of nouns in particular is not only in a high degree accurate as a representation of facts, but furnishes most interesting illustrations of the relation of Assyrian to the cognate languages. We are also glad to find that the author has avoided several misleading and incorrect views of recent Assyriologists, which spring from a too hasty combination of the peculiar phenomena of Assyrian with those of other Semitic languages. The remarks on the pronouns and numerals are mostly such as we entirely concur with. It is otherwise with the verbs. Here we cannot help expressing grave doubts as to many of the theories proposed by Mr. Sayce. Not that his account of the fundamental features of the Assyrian verbal formation is not substantially accurate, but it seems to us that he has attached too much weight to the authority of Dr. Hincks, eminent as this lamented scholar must be admitted to be. He has thus been misled into adopting a number of tense and mood distinctions, the existence of which in Assyrian cannot be at all proved. We hope to return to this subject in another place, and therefore abstain from entering into further detail, as also from following the author in his sketch of the Assyrian syntax, in our opinion one of the most meritorious parts of the book. We may be allowed, however, to express a regret, which has repeatedly forced itself upon us in perusing the work, relative to the omission of references for the examples adduced. Not that these have been selected arbitrarily; indeed, our own reading enables us to guarantee their reliability. But the reader who is less acquainted with these new studies, and perhaps somewhat sceptically inclined, may be excused for wishing to control the author's statements by a reference to the *data* on which they are founded. In many cases, too, the Assyriologist himself will desire to test the character of the example by an inspection of the original text, simply on the ground of the variety of interpretation to which cuneiform writing is liable. After giving this free expression to our wishes, we once more congratulate both authors on their excellent works, and trust we may often meet them again in the field of Assyriology.

E. SCHRADER.

New Publications.

BAUER, Wolfgang. Zu Euripides' Iphigenie auf Taurien. Kritisches u. Exegetisches. München : Lindauer'sche B.

CAPELLER, C. Die Ganachandas. Ein Beitrag zur indischen Metrik. Leipzig. (Jena : Frommann.)

ERMERINS, F. L. Epistola critica ad Soranum a se editum. Accedit de vita Ermerinsii editoris Epilogus. Utrecht : Kemink u. Sohn.

GARCKE, H. Die wichtigsten anomalen Verba bei Homer. Im Anschluss an Köpke's Homerische Formenlehre. Altenburg : Schnuphase.

KOZIOL, H. Der Stil d. Apuleius. Ein Beitrag zur Kenntniss d. sogenannten afrikanischen Lateins. Wien : Gerold's Sohn.

LENORMANT, Fr. Essai sur la Propagation de l'Alphabet phénicien. Vol. I. Part I. Paris : Maisonneuve.

LENORMANT, Fr. Lettres assyriologiques. Vol. II. Paris : Maisonneuve.

MARTIN, E. Das historische Studium der neueren Sprachen und seine Bedeutung für den Schulgebrauch zunächst in Baden. Freiburg i. B. : Wagner.

* I am indebted to Professor Wright for a reference to his Catalogue of Syriac MSS. in the British Museum, iii. 227, which will soon be published; and to Mr. Cheyne for one to Chwolsohn, *Sabier*, i. 304.

THE ACADEMY.

"INTER SILVAS ACADEMI QUARERRE VERUM."

Vol. III.—No. 56.

Readers are reminded that the mention of New Books, Articles, &c., in our lists is intended as a guarantee of their importance. The Editor of THE ACADEMY cannot undertake to return communications which are not asked for. The Editor cannot reply to questions from authors respecting the notice of their books. The next number will be published on Tuesday, October 1, and Advertisements should be sent in by September 27.

General Literature.

Erasme. M. Durand du Laur. Two volumes. Paris : Didier et C^{ie}.

ERASMUS stands at the end of a period as Abelard stands at the beginning : the real significance of both is to be found in the success with which they hustled one system of education out and ushered another in. The essential qualifications for such a function are incompatible with real depth, which cannot exist apart from reverence. If Abelard and Erasmus had understood what they displaced, they would have been encumbered by their respect for it. As it was, they were earnest enough to go through with their work, not too self-forgetful to be flippant, and shallow enough to be plausible. In other respects they differed widely : Abelard was haughty, pugnacious, impulsive, and brilliant ; Erasmus was cautious, insinuating, and capricious. Abelard, in spite of the great scandal of his life, was of a temperament to which austerities are not unwelcome ; Erasmus was decorous as a matter both of interest and of conviction, but in him the craving after physical, sensuous comfort was something ineradicable. Both came into conflict with traditional orthodoxy without exactly intending it, for neither was capable of realising the way in which a great system hangs together ; and they imagined that they were only protesting against the obstructiveness of a clique of pedants, while they were really attacking the essence of Catholicism. Even here there was a difference. Abelard's proposal to recast Christianity by the aid of dialectics was put forward openly upon positive grounds, and he persevered with it till the final collapse into penitentialism, when no price seemed too high to pay for inward and outward peace. And the superfluous offence he gave was by a spirit of personal rivalry, the impulse to conquer and outshine every distinguished teacher of the day on his own subject. Erasmus shrank from all personal disputes and rivalries, but his irrepressible sense of the ridiculous frequently led him beyond the limits within which he desired to remain. Both Erasmus and Abelard succeeded completely in giving a new direction to education ; both aimed at giving a new direction to opinion, and upon the whole it must be said that they failed. Abelard failed completely ; Erasmus succeeded to the extent of founding a tradition which survived and propagated itself through underground channels till it emerged again to swell the torrent of the eighteenth century. The difference between their methods may account to some extent for the difference of their fate. In the twelfth century instruction was still democratic, and the idea of open questions was still in the distance : rationalists knew of no limits to the efficacy of reason in solving all intelligible questions to

VOL. III.—NO. 56.

the enlightenment of all willing minds. Abelard was at once a gladiator and a demagogue having perfect confidence in himself and inspiring perfect confidence in his hearers ; but he roused the full strength of orthodoxy when it was strong, and he was shattered in the contest. The close of the fifteenth century found what knowledge was still left in the possession of a narrow body composed almost exclusively of those who, if they did not exactly make a trade of knowledge, valued it only or chiefly as an instrument of professional advancement. The aim of Erasmus was to transform this professional body of learned men into something more rational, to replace their fixed unintelligent traditions by flexible opinions intelligently held, and to diffuse just enough enlightenment among the upper strata of lay society to act as a solvent to professional obstructiveness, a stimulant to professional inertia. To put it shortly, Abelard wanted to convert the world to knowledge, Erasmus to influence society by the instructed public opinion of the enlightened classes. In this he has been plausibly compared to Voltaire, though perhaps neither he nor Voltaire would have considered the comparison exactly complimentary, as Voltaire in spite of the *Henriade* was an amusing writer, and Erasmus, in spite of more than one shabby episode, was upon the whole an honest man. In fact, if it is hardly to the credit of the middle ages intellectually that they left the mind of Europe in a condition to be amused and dazzled by the wit and humour of Erasmus, it is hardly to the credit morally of the influences which succeeded mediaevalism that the Voltaire of the fifteenth century, nurtured in the midst of the ecclesiastical corruption which is supposed to have justified all the stupidities and brutalities of the Reformers, should have been, after making all allowances, so much more serious, more moral, and more reasonable than the Voltaire of the eighteenth. But in spite of this double contrast there is an obvious foundation for M. Durand du Laur's parallel. Both led for many years the life of missionaries of culture, and both attained the position of heads of the commonwealth of letters, that is to say, they were beyond dispute the foremost members of a cosmopolitan clique which had unbounded influence over public opinion and very little upon the opinion of the people. Both were in favour of leaving the framework of things as they were with as little disturbance as possible, and both by their raillery prepared the way for much more sweeping changes than they desired. Both, too, succeeded in getting the changes which they did desire patronised by the heads of the society which they were sapping. Voltaire got the pope to give him relics for his church at Ferney. Erasmus got the blessing of Leo X. upon his paraphrase of St. Paul. Both, lastly, had a natural talent for superficial servility ; both, especially Erasmus, had an inextinguishable hankering after personal independence. In one respect Voltaire was the most fortunate ; he outlived the conservative attempts to put him down, and he died before any liberal had seriously attempted to put him aside. Erasmus passed the last eighteen years of his life under a cross-fire of increasing severity between the monks, who had got a chance at last of persuading the world that the precursor of Luther must be dangerous, and Luther himself, of whose proceedings and surroundings he conscientiously disapproved.

The Reformation was from every point of view an immense misfortune to Erasmus. His European reputation really rested on the fact that on his return from Italy the Germans had selected him by acclamation as their foremost scholar. When Luther appeared, the *litterati* who had given Erasmus his position were with scarcely an exception swept away by the new movement. No doubt Erasmus might have been the titular chief if he pleased, but neither his con-

science nor his vanity would have been satisfied with a nominal command, and Luther was too massive to be thrust aside as he himself had thrust aside Carlstadt. Then Erasmus saw that, whichever side won, the victory would be a defeat for "good letters and evangelical philosophy": if the Dominicans put down Luther they would prove to the satisfaction of all conservatives that there was no safety away from scholasticism; if Luther held his own, still much that Erasmus was anxious to keep would have been abolished, and more than one repulsive paradox would have been established; and both results would have been reached by an appeal from the cultivated to the uncultivated, from common sense to passion. His course during the crisis has been stigmatised as cowardly, but it was not cowardice which kept him from throwing in his lot with Luther. It was really his fear of Luther and of the public opinion which Luther led which made him give exaggerated expression to his fear of the pope and talk about his unfitness for martyrdom. For a moment Luther, with his astonishing arrogance, actually took the Patriarch of the Humanists at his word, and offered to patronise and protect him as a timid disciple, well-meaning, but too weak to act up to his convictions. Put in this way the offer was too transparently insulting; the Reformer should have talked of respecting the honourable scruples of an elder generation; but he was too impetuous to imagine honest and intelligent opposition as possible. Erasmus was not too cowardly to be piqued by the monks into giving them a great deal of needless provocation in his *Colloquies*, at a time when it was really possible that an ill-advised journey on the part of a man who was always travelling might give them the chance of burning him: he allowed Luther to provoke him at last into an imitation of his own scurrility; but if we ask why he was so long in writing the book on the *Freedom of the Will*, and so much longer in completing his rejoinder to Luther's reply, the only answer is he was afraid of giving offence by coming into collision with the Reformers. If further proof is wanted that it was the revolution that he feared even more than the reaction, it is to be found in the energy with which he pressed the necessity of concessions on all the authorities whom he expected to influence. He was emphatically a "man of order," and men of order are for the most part timid; the only question is whether their timidity shall take the form of repression or of conciliation. The form that Erasmus' timidity took was not determined exclusively by his fear of the Reformers, it was determined also by his real indifference to the points in dispute. He could see Luther's antinomianism, he could not see his spirituality, and though he was attached to the historical continuity of the church, he neither understood nor valued Catholicism. What would have pleased him best would have been that the church should go as far as possible without stultifying herself in the direction of abolishing distinctive Christianity, while energetically propagating as much of the morality of the Gospel as could plausibly be grafted upon the morality of Plutarch. It is curious to reflect, when we come to measure what the Reformation permanently effected, that it really succeeded exactly so far as Erasmus approved of it, and that this modest success has been rather compromised than facilitated by the spasmodic efforts which have been made on a perpetually dwindling scale to persuade mankind of the vital necessity of going through an imitation of Luther's imitation of the spiritual conflicts of St. Paul. The common sense of Erasmus approved of the Reformation exactly so far as it was a safe and sensible attempt to make religion a good deal more natural and a little more fervent. It might perhaps have been expected that, after having appealed to common sense against Catho-

licism, Protestantism should have been subjugated by its own ally; but it is curious that Erasmus should have divined so exactly the terms of the ultimate arrangement which might be maintained indefinitely if knowledge were as stationary as common sense.

The success with which Erasmus anticipated the judgment of posterity is a measure of his real force and depth, and may serve to explain what needs explaining, the immense position which he acquired among his contemporaries.

He had nearly everything against him. His position was low; his character was not imposing; though his manners were winning, he could not profit much by the favourable impression they created. He was too fastidious, too capricious, too independent to be a pleasant person to patronise, and his transparent attempts to play off one patron against the other generally ended in his falling between two stools. From the time that he left his monastery he was always posing without effect as the victim of circumstances; he was constantly making enemies by indiscretions, like coupling Budaeus with Badius, indiscretions which proceeded not so much from an unwillingness to recognise distinction in others as from an inbred poverty of nature to which frank recognition of greatness was not congenial. As a scholar he was too omnivorous to be refined. Plutarch was his favourite philosopher. In the *Ciceronianus* he never touches the fundamental question. If Latin was a living language, no doubt the Ciceronians were wrong; but if so, the language of the *Epistolae Obscurorum Virorum* was a legitimate though hardly a desirable development, and Erasmus' proposal to reform it on the model of the classics in general was about as reasonable as an attempt would be now to chasten the style of modern journalism into a tolerable resemblance to the sober dignity of the Elizabethan age. But we do Erasmus an injustice when we treat the *Ciceronianus* as a work of disinterested criticism; it is really an attack upon Roman neopaganism, which the author did not venture to assail more directly because most of the neopagans occupied high ecclesiastical position; though their attitude affronted his respect for the person of Christ, which in his latter years at any rate seems to have been the strongest and most permanent of his feelings. He did more than perhaps any other one man to familiarise the world with Christian antiquity; but his want of transcendental insight prevented him from understanding it; he assumed that the Bible was to be interpreted throughout on common-sense assumptions, and when the Fathers interpreted it otherwise, he could only suppose that their judgment was warped by the necessity of combating heresy.

His political views were no deeper than his theological. He disliked oppression, and he had a keen sense that the interest of sovereigns was easily separable from that of peoples; he had the *bourgeois* horror of war to such an extraordinary extent that he actually maintained the prudence of buying off an invasion; it is needless to add that, like all advocates of peace at any price, he assumed that a nation can develop itself indifferently in any direction which at a given moment is physically possible, and that therefore, if development in one direction is obstructed by another nation, it is always a waste of power to endeavour to remove the obstruction by war.

Of course this only amounts to saying that, like Voltaire and the other writers of the *Aufklärung*, Erasmus was essentially superficial and one-sided; but he had little or nothing of their literary perfection. His wit, with few exceptions, is of the order

"lusco qui possit dicere lusce."

His irony consists of saying the reverse of what he means, and reminding the reader at short intervals that "this is said kinder sarkastical;" but with all these defects of matter

and manner, he shared with the men of the eighteenth century the one inestimable talent of discovering the line of least resistance for the numerous minds which liked to think that they thought. His forcible fluency constantly gave his contemporaries the satisfaction of the *bourgeois gentilhomme* when he learned that he had been in the habit of talking prose.

His best work is the *Praise of Folly*, where the satire, though still rudimentary, is at least two-edged ; it reminds us of the *Utopia*, as that reminds us of such a really great work as *Don Quixote*. Cervantes' thesis is quite as much that the world is no place for a man of honour as that knighthood is obsolete and ridiculous ; More's thesis is not only that existing European society is irrational, but that no rational society is possible, since an attempt to follow reason issues in the grotesque absurdities and immoralities of *Utopia* : Erasmus' thesis is not only that dignitaries are generally fools, but that to obtain success of any kind, either practical authority or the voluptuous ecstasies of transcendental pietism (for which Erasmus' early work, *De Contemptu Mundi*, shows a curious hankering), it is necessary to repudiate the good sense which was the idol both of his judgment and his desires.

M. Durand du Laur's two volumes are full, accurate, and intelligent, everything but masterly : consequently he fails to give as vivid an impression as such an inaccurate writer as Jortin (whom apparently he did not think it worth while to use), and the plan of treating the "Vie" and "Oeuvre" separately leads to a good deal of repetition ; but the pains-taking, straightforward diligence of the writer gives the book a value of its own, besides its convenience in making the researches of Low Country scholars accessible to the general public.

G. A. SIMCOX.

The Tale of Frithiof. By Esias Tegnér. Translated from the Swedish by Captain H. Spalding. Murray.

CAPTAIN SPALDING must of course be aware, though there is not a word in his preface to show it, that he has had many predecessors in the labour he has taken on himself. The presence of many competitors would seem naturally to enforce a special carefulness on each new candidate for the laurels of translation ; and it is rather surprising that this handsome volume should contain so little that is satisfactory from a poetical point of view. Before he undertook to translate a work so illustrious for melody as *Frithjof's Saga* is, Captain Spalding should have assured himself that he had the requisite power and a due flame of enthusiasm, while in fact it is plain that he is too little a poet to be a poet's interpreter, and equally plain that he has faltered and grown weary, at times, of his work. However, it is good, in spite of Captain Spalding's shortcomings, to be brought once more face to face with the Bishop of Wexio's beautiful masterpiece, and so saying, let us pass from the translator to the poet.

No attempt is made in this volume to add to the critical or controversial history of the poem. The writer has contented himself with adding a few notes on the Norse mythology, and then has left the text to introduce itself, without a word to show when, how, or why it was originally written. Now that all the various streams of flattering or adverse comment have subsided in the course of half a century, it is obvious that *Frithjof's Saga* has a fixed and important position among the classics of modern times, and in spite of all just or unjust criticism will be read and valued to the end of time. The year of its original publication, 1825, is the culminating point in the Swedish literature of our century, and since then it has been impossible for any poet in Sweden to write without being in somewise influenced by its mannerisms.

The history of Swedish poetry is encumbered by the grotesque names of many warring schools. During the earliest years of the present century, the field of poetry was pretty equally held by two of these, the Academic, who clung to old-established forms, and the Phosphorescent, who, represented most fully by Atterbom, brought in an ideal element and studied the newest theories of Tieck and Novalis. In opposition to both of these there arose, a little later, headed by the eminent Geijer, another active school, known as the Gothic, which, rising on the ruins of the two former, rallied round a national and antiquarian banner, and repudiated both the conventional and the German tendencies in favour of aims more directly Scandinavian. Out of this last, and yet with a certain arrogance holding himself aloof from it, rose Tegnér, whose desire was to collect all the best from all the schools, and form thereby a standard of excellence for all future time. *Frithjof's Saga* was the result of this endeavour, and as soon as it appeared, the victory of its author was complete, and a new period began. Since *Frithjof's Saga* Sweden has possessed no Phosphorists and no Goths.

The Icelandic saga from which Tegnér gained his plot and the suggestions for his characters differs in no important feature from the rest of its class. It paints in simple colours, or rather in mere black and white, the wild sea-faring life by barren fjord and holm, before Christianity came with its southern glow of sentiment and tender emotion. Frithjof is drawn as a Viking of the most masculine sort, of superhuman strength and daring, a man who gives hard blows, and has no fear of gods or men ; King Helgi calls him "a wrongdoer who heedeth no place of peace," in other words, a sacrilegious person, for whom sanctuaries have no terror, if their barriers restrain his passions. Through the whole saga blows a stiff northerly gale, interpenetrated with sharp salt savours. He who will may read it in Mr. William Morris' exquisite English. But turn to Tegnér, and one finds a Frithjof of the Provençal order, a delicate troubadour sighing among nightingales and roses, while odorous winds carry the murmuring sounds of flute and guitar through such woods as Scandinavia never saw. The contrast is complete.

That the spirit of Tegnér's poem is different from that of the old sagas and of ancient Norse poetry generally, has always been admitted at the outset ; but whether the author erred or no in his latter-day treatment of the theme, and how far the modern element in his epic spoiled it as a whole, have been questions productive of much violent discussion. One thing is evident enough, that Tegnér took his immediate inspiration, not from the saga literature itself, but through the medium of contemporary writers. In Sweden several poets, Geijer for instance, and Ling, had already handled old Scandinavian subjects, but the real origin of Tegnér's bias for these is to be found in the splendid successes just then being achieved in the same field by Öhenschläger. Tegnér has admitted that the form and spirit of the latter poet's *Helge* exercised a strong influence over him when he was planning *Frithjof's Saga*. Now to us in these days of antiquarian research and artistic realism, it is easy to see that the rhetorical and ornamental style of Öhenschläger, however beautiful in itself, was very far from adequately representing the spirit of the pagan times, but half a century ago it was not so easy, and probably Geijer was the only man then writing who formed a just conception of what a Viking should be. The idealising soul of Tegnér found rest in the treatment that Öhenschläger suggested ; he added to the vigour of the Danish poet his own peculiar sweetness and polish, and the result was a poem which will always be one of the most lovely in the language, but in

which the execution of the constituent lyrical parts must be felt to clash with the great epical basis. And this is why its influence on succeeding writers has been pernicious; *Frithjofs Saga* has been a magnificent upas-tree, distilling the poisonous dews of feebleness and unreality down on all poets that have sat under its branches.

It must be remembered that the criticism of our day demands a sterner, or at least an exacter, realism in art than that of Tegnér's generation did. In the earlier years of the century a tinge of semi-religious sentiment was demanded from a poet dealing with mythological themes. Considering this, and remembering how completely Tegnér was a man of the time, it is interesting to read his own estimate of *Frithjofs Saga* as embodied in a letter to Franzén. "My design was," he says, "to present a poetical picture of the old Scandinavian heroic life; it was not Frithjof as an individual, but the time which he may be taken to represent, that I wished to paint . . . In the saga there is much that is grand and heroic, which holds good for all time, and so both could and should be retained, but there is also a certain rough and barbaric wildness, which ought either to be altogether thrown out or at least to be toned down. On the one hand the poem ought not to outrage our finer customs and ideas too much, and on the other hand what is national and healthy and natural must not be sacrificed; a cold winter air, a fresh wind must blow through the poem, for it belongs to the northern climate and character, but not so that the quicksilver freezes, and all the tenderest emotions of the heart are sealed."

No one can complain that the 'quicksilver freezes in *Frithjofs Saga*. It is one of the warmest and purest love-poems of modern times, and must build an everlasting niche for its author high on the northern front of the Temple of Fame.

EDMUND W. GOSSE.

Journal et Correspondance de André-Marie Ampère. Publié par Mme E. C. Paris.

THE name of André-Marie Ampère is not so well known in England as it should be, but those who are best acquainted with his titles to fame will be least prepared for the light in which he appears in the present little volume. It is difficult to recognise the irritable, absent-minded mathematician, whose blunders were one of the standing jokes of Parisian society, in the ingenuous hero of a short and simple love story, which is so very short and so very simple, that being sad as well, it is also very pretty. And yet to those—like his son and a few intimate friends—who believed Ampère's genius to be of the order of Newton, Kepler, or Copernicus, the discrepancy between his powers and his achievements, considerable as the latter were, always seemed to need explanation, just such an explanation in fact as is afforded by the untimely conclusion of his juvenile romance, and its effect upon his sensitive, indolent, versatile character. A similar blow, the death of his father, one of the victims of the Jacobins at Lyons, in 1793, had reduced him to a state approaching idiocy, and when, after the interval of a year, his mind regained its activity, the direction of his studies was completely changed. As a child his mathematical precocity was on a par with Pascal's; at eighteen he knew as much, according to his own account, as ever afterwards, and his father might with good reason write, just before his death: "Quant à mon fils, il n'y a rien que je n'attende de lui." But mathematics were forgotten in his grief, and for long afterwards. Rousseau and botany roused him from his stupefaction; he had learnt Latin once to read Euler, he learnt it again to read Horace; the classical poets were his companions as he wandered in search of botanical specimens,

and he came back at night to write dramas and idylls. Three years of this desultory existence bring him to the opening of his own idyll.

"1796. Dimanche, 10 avril. Je l'ai vue pour la première fois." This is the first entry in a journal where proper names are scarcely needed, for there is but one "she" in the world to Ampère. She lends him a book, she is not at home, she tells him not to call so often, she asks him for some verses; he eats a cherry she has dropped, he helps her over a stile; she finds fault with his dress, she talks about his prospects, she tells him not to do this or that "before people." And so for three mortal years, and many pages of round schoolboy handwriting, intermixed with much of *x* and *y*, the good innocent youth prolongs a courtship which might have melted a harder heart than that of M^{me} Julie Carron. She married him at last, though he had nothing in particular to live on, because he was thoroughly good, very much in love, and in some inscrutable way had succeeded in convincing her imagination that despite his *gaucherie*, his social ineptitude, he was really a remarkable man. This discovery is the more creditable to M^{me} Julie's perspicacity because there was no one in their neighbourhood qualified to do justice to Ampère's talents, and he himself had hardly yet realised their existence. It took him eighteen years to find out that he was shortsighted, and it took him longer still to discover that he was one of the first mathematicians in France: Julie did not wait for the discovery, and it was made the sooner for her sake.

Julie, whom we know from her own and her sister's letters, as well as from André's journal, seems to have been a pretty, clever, and eminently sensible young woman, the reverse of emotional, very fond of her husband, and prudent enough for two; but her crowning merit was the happy tact with which she distinguished from the first between the man and the *savant* lodging together in her sheepish lover's frame: she sets the one remorselessly to rights about his wardrobe, his private pupils, his behaviour in society, but she receives the assurances of the other with the implicit faith that is the best encouragement; she believed in the goodness of André's brains as she believed in the goodness of his heart, by direct intuition; the praise of others confirmed, but did not alter her judgment, and she valued it chiefly as promising an increase of income. Such a wife was peculiarly valuable to a man like Ampère, who had all the childishness of genius in a singular degree. Her sympathy would have encouraged him to sustained effort, and the wish to justify her preference would have stimulated him to original discoveries, of which he could lay the reward at her feet. Unfortunately, after the birth of a son, Julie's health gave way, and within three years of his marriage André became a widower, just as a brilliant career seemed to be opening before him.

The remainder of his life was not unprosperous. He had valued friends, his son was all that could be wished; he even married again. But those who knew him best thought him sad; they looked upon him as a man to whom something was wanting, and that is exactly the feeling that seems to have haunted him in his most brilliant successes. He was constantly comparing what he might have done and what he might have been with what he was; he looked in vain for a substitute for the immediate personal motive to exertion which he had lost, and he was too much discouraged by this first failure to try and dispense with such an incentive altogether. What he did was the least, not the most, of which he was capable. In the lives of the greatest discoverers one engrossing scientific interest seems to swallow up all the rest, but the universality of Ampère's genius was against him here. The subjects which had the strongest attraction for him personally promised him little increase of fame;

being naturally unambitious, he was not deterred by this consideration ; but from what we know of Julie, it is allowable to conjecture that she would have suggested to her erratic philosopher to keep to the point and attend to one thing at a time ; she would have discouraged his metaphysical reveries, not because metaphysics may not be as good in themselves as chemistry or commerce, but because Ampère's talent for the luminous co-ordination of facts could be so much better employed than upon the few and uncertain facts of psychology. The unpractical André persuaded himself that he was doing as good service to science by satisfying his own curiosity about the foundations of knowledge as if he had been constantly adding to its superstructure ; he had an uneasy feeling of disappointment when the world thought otherwise, and declined to give as much weight to his philosophical convictions as to his scientific demonstrations.

Still it is unfair to speak of his career as a failure. The powers of his mind were dissipated amongst many objects instead of concentrated upon one, and the positive result of his work was diminished in proportion, but that is all. His great discovery, that of the law according to which the magnetic needle is attracted and repelled by electric currents, is one which, according to Arago, scarcely any other man in Europe could have made. It required a genius for hypothesis as well as a genius for experiment, and the verification of his hypotheses was the first *proof* of what Oerstedt's observations only suggested, namely, the common origin of electric and magnetic phenomena. When it is added that this demonstration was substantially perfected in seven days, Jean-Jacques Ampère's estimate of his father's powers seems scarcely exaggerated. In controversies relating to sciences with which he was less familiar, and there are few of which he was altogether ignorant, he almost always took the side of the minority that was in the right ; many happy conjectures must have been lost when he burnt an early work on *The Future of Chemistry*, in a fit of religious remorse at its audacity. His interest in electro-magnetism cooled after two or three years, and as he grew older his mind presented a very curious combination of indolence and impetuosity. He would hold forth for thirteen consecutive hours upon a theory of the universe ; when he was dying, he rebuked a friend for declining a discussion on the ground of his health : "Between us there should be question of nothing but Eternal Truths !" Yet the books on his shelves were mostly uncut, only here and there sawn open by a clumsy finger, and he gave in all good faith as a reason for declining an important appointment that he would have before accepting it to read two short memoirs, by a writer whom he esteemed, on a subject in which he was much interested ! And all the while he was engaged upon a Classification of the Sciences —of which he enumerated 168—and he was so far from being indifferent to the results of modern speculation that he was personally pained if any one, knowing his peculiarities, would maliciously cast a doubt upon one of his favourite opinions, the reality of space, for instance, or the possibility of a new race arising as superior to men as men to mastodons ; some one asked him what he, Ampère, would be the better for the latter event, and his surprise and distress at "the inconceivable stupidity" of the demand were quite pathetic.

The last letter given in this volume is dated 1805, about a year and a half after his wife's death : it is to Elise, her sister and confidante, whose lively and circumstantial letters do even more than the naïf entries in André's journal to transport us into the midst of the happy family, so soon, alas ! to be broken up. He speaks there of the "moral apathy" which constitutes his existence. A little later, at

the beginning of his correspondence with Maine de Biran, he says that his condition is substantially unchanged, but he has "begun to derive some satisfaction from researches in psychology." These researches gave him the same kind of consolation and distraction as he had found in literature after his father's death, but the results to which they led were little more substantial. He approached the subject at what, for him, was an unfortunate time. The whole bent of his mind was opposed to scepticism : it was too active, too inventive to rest satisfied with criticism ; his appetite for knowledge was insatiable, and because he could digest the most abundant materials, he was loth to believe that the materials available for his use could be scanty. Hence a kind of facility of belief, which he himself called "credibility," and a consequent preference for realism, as offering most objects of immediate knowledge. "A quoi sert le monde ?" he asked : "à donner des idées aux âmes ;" and he failed to reflect that this result, the possession of ideas by the soul, remained the same whether the ideas came from within or from without. His desire for certitude required something more comprehensive than the truths of particular sciences, and even these truths seemed to him to be called in question by modern idealism. Partly from the indolence already referred to, he never quite succeeded in mastering the philosophy he rejected ; he confounded phenomenism and scepticism, putting Kant and Berkeley on a line with Hume, and for scepticism he had a moral aversion ; it was the vacuum which his intellect abhorred. His misconception of the tendency of modern speculation was the more unfortunate as it led him to begin his classification of the sciences—an undertaking for which his encyclopaedic attainments rendered him eminently fit—at what must be called the wrong end. His divisions are ingenious enough, but they are entirely arbitrary ; he only enumerates and classes the various possible objects of knowledge or thought, and assigns a separate science to each group. But if such a classification is to be more than a learned *jeu d'esprit*, it must rest on a psychological basis, and Ampère's genius would have been fitly employed in correcting and formulating the laws which regulate the relations of phenomena in the mind, still subject—if he pleased to think so—to subsequent verification by comparison with patent objective realities. In fact the "théorie des rapports," which his son celebrates as a discovery scarcely less important than "Ampère's law," is a statement, though not a solution, of this problem : it is also the most original feature in his metaphysical system, which would otherwise have little to distinguish it from Maine de Biran's spiritual eclecticism. He defines a sound hypothesis as one which not only explains why things are as they are, but why they could not be otherwise. Now the existence of external objects is a hypothesis, but if they exist and cause, those two facts explain not only why their effects, our sensations to wit, are what they are, but also that they could not be otherwise, for an effect is something which follows necessarily from the nature of the cause. But if our sensations have no external cause, they might just as well be altogether different. Therefore the first hypothesis is to be preferred. (There is a curiously similar argument in Mr. Herbert Spencer's essay on "The Universal Postulate.") The existence of external objects is first suggested to us by our consciousness of sensations caused by some *Not I* : causality is a relation, and the reality of this relation is directly evidenced by consciousness, consequently the existence of relations is a reality, and therefore the things related are also real. Compared with other ways of arriving at a foregone conclusion, the argument is not without ingenuity. We perceive a thing by sense, but only know it by its relations, and he proceeds to

distinguish two classes of relations, those that express material resemblance and difference, and those (like space and time) which, being independent of the nature of the terms in which they are expressed, appear to be applicable to noumena. The primary qualities of things are the relations of noumena to each other, but we can only know those relations which exist between phenomena as well as between noumena; infinite possibilities of knowledge remain beyond our grasp, or, as Ampère expresses it with characteristic melancholy fervour, "Que de rapports de noumènes invinciblement ignorés!" He attempts to qualify the dangerous doctrine that knowledge is only of relations by the saving clause that true knowledge must reflect the relations of "things in themselves," but the admission is still tantamount to a concession to idealism; the relations are the same, whatever the names by which the objects related are known, but he omits altogether to explain what ground we have for supposing that *any* of the relations of noumena are similar to or identical with those which we discern amongst phenomena. The fact was that he never really thought out the system to fragments of which he was passionately attached; and it is possible that his son, in endeavouring to harmonize the disjointed records of his opinions, may have made them at once more coherent and less plausible, more consistent and less suggestive, than they would have seemed in their natural and original disorder.

Good or bad, Ampère's metaphysics have nothing to do with the readability of the book which tells the story of his first love. As an amusing study of character, and a picture—a most favourable one—of the moral tone and mental cultivation of the provincial *bourgeoisie* of France during the Revolution, it would be interesting even if the hero had never been anything but an obscure usher. It may seem a questionable compliment at the present day, but the letters of the two sisters almost remind us of the correspondence between Richardson's Clarissa and Anna, Harriet and Charlotte; they are not nearly so long, much more lively, and perfectly easy and natural, but they are quite as literary, and, to complete the analogy, while Julie is always self-possessed, tranquil, and impeccable, Elise is lively, passionate, satirical; both are cleverer and better educated than, in spite of Richardson, we believe was commonly the case with their English contemporaries, and the cause must be the good effects of centralisation in literature. Till the present century there was only one literature in France, and that was the best; those who read at all read this, and though culture was not universal, whatever there was of it was good of its kind: the standard was the same at Paris and at Polémieux.

H. LAWRENNY.

LITERARY NOTES.

M. Émile Montégut, in his "Impressions de Voyage et d'Art" (*Revue des deux Mondes*, Sept. 1), gives a very interesting description of the château de Bussy, in the Côte-d'Or, where M^{me} de Sévigné's scandalous cousin, the count de Bussy-Rabutin, spent his time in continuing to deserve the exile to which he had been condemned for his *Histoire scandaleuse des Gaules*. Like the châteaux of Tanlay, which belonged to the Colignys, and Ancy-le-Franc, built in the sixteenth century by the house of Clermont-Tonnerre, acquired by Louvois at the end of the seventeenth century, and recently recovered by the heir of the first owners, Bussy has escaped not only undestroyed, but unaltered since the days when, as has been said, Bussy-Rabutin amused himself by turning it into a standing commentary and illustration of his book. The walls and ceilings are covered with portraits, allegorical devices, mottoes, and embodied slanders, which, though not always of artistic value, are of the greatest interest to students of the literature and history of the period. One room is set apart for the portraits of the greatest generals of all times and

countries—Condé, Cromwell, Gustavus Adolphus, Spinola, Wallenstein, &c.—with whom it was one of Bussy's most harmless foibles to believe he might, but for the royal injustice, have competed on equal terms.

The copy of the *Diurnali* of Matteo da Giovenazzo mentioned in a note of the *Academy*, July 1 (vol. iii. p. 246), proves to belong to an edition printed in the seventeenth century, and consequently can throw no light upon the question whether or not they were forged in the sixteenth century; however, a new edition is to be published, based on the printed text, those hitherto in existence having been taken from various MSS.

In the *Allgemeine Zeitung* (August 28, 29), Dr. Sepp attempts to connect the legend of the holy house of Loretto with Indian, Greek, Mahomedan, Scandinavian, Keltic, and other legends of miraculous and migratory sanctuaries on the one hand, and on the other with an old Italian tradition of the landing of Aeneas with his household gods at Laurentum, which would make the black Madonna of Loretto the direct representative of the dark Acca Larentia. Both views are intrinsically plausible, but at present a little more direct evidence is needed to make them acceptable.

A correspondent of the *Journal de Saint-Pétersbourg* describes the magnificence of an illuminated copy of the sacred writings of Buddha, in the language of Thibet, which is being executed for a Mongol prince; it will consist of 108 folio volumes, of which 80 are completed, all in letters of gold, and bound in embroidered silk with silver clasps. The copyist is to receive 30,000 roubles (about 500*l.*) for the whole work.

Bishop Nicholas Grundwig, well known as a collector of Danish national songs, &c., died on the 2nd of September. He was born in 1783; his first work on Northern mythology was published in 1808, and his enthusiasm for the provincial literature of Denmark continued all his life unequalled except by his dislike of the political influence of Germany. As priest and bishop, his liberal views met with much opposition among the clergy; but they augmented rather than impaired his popularity as a man of letters.

In the *Contemporary Review*, Mr. J. A. Symonds translates some of Michael Angelo's sonnets, from the new and corrected edition by Signor Guasti. He is very successful in straightening the involved constructions of the original, and the clearness is attained without any sacrifice of dignity; of course, something must be lost in poems which Wordsworth pronounced altogether untranslateable; and in this case it is perhaps the crowded richness of thought and imagery which is Elizabethan rather than Miltonic.

In the *Fortnightly Review*, Mr. Swinburne dwells on the passages of poetical beauty in Victor Hugo's *L'Année terrible*, and objects that most of the author's critics are desirous of gathering figs from the vine, and grapes from the fig-tree. He excuses the exaltation of Paris, with all its faults and follies, by suggesting that the Paris of the poet is a kind of ideal city—metropolis of regenerate humanity; but he thinks a few lines of penitence for the sins (beginning with the Roman expedition), for which *L'Année terrible* was the expiation, would not have been out of place.

Blackwood and *Fraser* contain alarmist articles on the industrial future of England, the former in the prophetic manner of the *Battle of Dorking*, the latter by "W. R. G." According to both articles, high wages mean high prices and diminished profits, and short hours mean diminished production; high prices mean lower purchasing power of wages, diminished profits mean transfer of capital to other trades, and diminished production means foreign competition, and all these together mean the impoverishment of the country through the ignorant greed of the working-classes; to which Mr. Greg adds, with justice, that the Poor Law interferes with the free action of supply and demand on the labour market. Mr. Harrison, in the *Fortnightly Review*, in treating the same subject, has the advantage of borrowing from Mr. Brassey (son of the great

contractor, and author of a candid book on *Work and Wages*) facts which are more consistent with the present commercial prosperity of the country and of better augury for its future. From these it appears that the cost of labour is very nearly the same all over the world, skilled labour being as much more efficient as it is higher-priced than unskilled, while its higher price stimulates the invention of mechanical contrivances for economy, which again call for more skill in the workman and still more ample remuneration. Similarly a day's work, whatever its length, varies very little in productiveness, the explanation of which lies in the remark of a workman to Mr. Harrison : "A man who can't tire himself out in eight hours isn't worth his salt ;" that is to say, the expenditure of the maximum of physical strength in the minimum of time is an art to be acquired like others, and great skill in it fairly commands a high price. Capitalists using the best machinery and the best labour find that they can produce faster and cheaper now than formerly ; and Mr. Harrison, as a positivist, infers that the trade of the country ought to be left to those who have proved themselves able to direct it most economically. But when we learn how very nearly stationary wages have been in almost all English trades during the last twenty years, it appears doubtful whether capitalists can be depended on to give a fair share of their growing profits to their employés, unless the competition of co-operative societies is added to the wasteful pressure of strikes. All three articles seem to look upon the struggle between labour and capital as a question of class rivalry, and deal more with the rights of each class against the other rather than with their duties to themselves and to the society of which they are each only a part. Mr. Greg thinks that the capitalist has a right to workmen at "reasonable" wages, and that the public has a right to have its bread baked and its coals dug by the classes that have been in the habit of baking and mining ; and though this is not exactly true, in practice the capitalist and the public have never yet failed to find workmen for wages very well within their means. Mr. Harrison, on the other hand, asserts the right of the miners, for instance, to be idle three days a week if they like, which is undeniable ; still, for their own sakes and that of society, they had better work all the six days unless they have something decidedly better to do ; if they have, or when they have, and society wants more coal than they supply, it will have to employ fresh miners to the relief of more crowded employments. England is certainly rich enough to support her population, and no class is interested in diminishing the total wealth, only in modifying its distribution, which Mr. Greg would not assert to be perfect. The only way to do so without pauperisation, and with production at its present standard, is to divide the work to be done more equally amongst all who want wages, and to make the minimum wage sufficient for the decent maintenance of its recipients. Till this point has been reached, it is premature to talk about the "extravagant demands" of labour, for society as a whole is plainly concerned to secure necessities to all before allowing luxuries to any.

Art.

ART NOTES.

During Mr. Layard's short tenure of office at home, he initiated what might have proved an enterprise of great extent and utility. Everyone is aware of the constant and gradual waste of the remains of antiquity which is taking place in this country. With the view to arrest the progress of this incessant dilapidation, at any rate in one direction, Mr. Layard projected a complete "Catalogue of such Regal and other Historical Tombs or Monuments existing in cathedrals, churches, and other public places and buildings, as it would be desirable to place under the protection and supervision of the Government with a view to their proper custody and preservation," and he applied to the Society of Antiquaries of London to furnish him with such a list. The council of the society met on February 23, 1869, and accepted with alacrity the onerous task proposed to them, pointing out at the same time that the labour of drawing up, even with approximate accuracy, such a list as that proposed in the letter from the Office of Works was one of no small magnitude, and would of necessity occupy considerable time. By

the beginning, however, of 1872 the committee appointed by the society to consider and act upon the application which had been made to it, had completed their labours in so far at least as regards the Sepulchral Monuments of England and Wales. The report presented by them was adopted by the president and council and forwarded to the Office of Works. But Mr. Layard was no longer First Commissioner, and painful misgiving seems to have come across the mind of the council lest all the trouble and expense which they had taken upon themselves at his instance should prove fruitless. For in the letter which accompanied the Report they express their wish "to be informed whether Her Majesty's Government designs on its own part to lay this Report and Appendix on the table of both Houses of Parliament for public information." Remembering the peculiar style in which the duties of First Commissioner of Works are discharged by the person who now fills that important office, it will not surprise anyone to find that the doubts of the council of the Society of Antiquaries were well founded, and that, beyond the copy of the correspondence and catalogue printed in return to an order of the House of Commons, no further result will come from Mr. Layard's wise and seasonable project. We find from this correspondence that the present First Commissioner, who is apparently wholly ignorant of, as well as indifferent to, the past history of his own country, not only declines to afford government aid in the preservation of these perishable records of the past, but has snubbed the Society of Antiquaries in the style of a pert attorney for the trouble which they have gratuitously undertaken. He writes back in acknowledgment of the receipt of the Report and Appendix that the object contemplated could not apparently be accomplished without legislation, and that there is no intention either of introducing a Bill or of laying before Parliament the Report which has been made by the Sepulchral Monuments Committee. The whole affair is thus at an end. Meanwhile we have in our hands the very valuable and careful catalogue of the Society of Antiquaries, which is in itself a most important document for the purposes of English antiquarian research. The list is confined, agreeably to the terms of the letter (written February 13, 1869, by Mr. Layard's instructions), to the tombs and monuments of occupants of the Throne and members of the Royal Family, or of such other persons as could fairly be considered, in respect of their actions or writings, to have distinguished themselves in the political or literary history of England. And the enquiry has been brought down to a date as late as anyone could desire, for it extends to the monuments of all those persons who died before the year 1760, that of the accession of George III. It will be seen that in the framing of these resolutions regard is not paid to the value of the monuments as mere works of art, but to the importance of the persons commemorated as actors in the great drama of national history. In this aspect it was felt that the simple gravestone which marks the interment of John Locke was more worthy of record than any more sumptuous monument erected to a person who had left no trace behind him in the history of his country. The committee distributed the counties of England and Wales amongst such of the Fellows of the Society, whether members of the committee or not, as appeared most likely, from their local knowledge or other reasons, to be able to furnish satisfactory information as to the monuments in existence in the districts assigned to them. These returns were made on a uniform plan, suitable for tabulation, and the list was finally prepared by the committee from the materials thus obtained. The list is arranged in two tables. Table A contains the personal and chronological arrangement in two divisions : first come the Regal monuments, and secondly the Historical, in which the claims of men of science, of authors, artists, actors, and musicians, are not forgotten. Table B gives the monuments described in Table A, but arranged topographically, according to counties and parishes, in alphabetical order. It is needless here to say anything in praise of the orderly method and thoroughness with which the scheme has been carried out. The names of Mr. Perceval, Mr. Oldfield, and Mr. Knight Watson, are in themselves a sufficient guarantee.

The *Gazette des Beaux-Arts* for September 1 contains :—A notice of the retrospective exhibition at Vendôme and of Vendôme antiquities. The notice is accompanied by an interesting

etching of La Poissonnière, the old manor-house in which Ronsard was born, by M. A. Queyroy.—A second article on the South Kensington Museum by M. René Ménard.—A critique by M. Henry Havard on the most remarkable examples of the Dutch School exhibited in Amsterdam in 1872. This paper is to be continued; the first section comments the Rembrandts, the Frans Hals, the van der Helsts, and a fine composition of van den Tempel, an artist whose work is rarely to be met with even in Holland. The present work belongs to the *Wale Weeshuis* (a charitable institution), and represents four directors of the establishment; it is so masterly and remarkable a painting as to justify to a certain extent, says M. Havard, the opinion pronounced by M. Viardot, that the most of van den Tempel's works pass in galleries at the present day under the name of van der Helst.—Letters of Vien and Lagrenée, forming the eleventh article of the correspondence of the directors of the French Academy at Rome.—London Exhibitions (first article), by M. Eugène Müntz. The writer says regarding English jewellery as represented *en masse* at the International, "a few examples will suffice to show that of all the heresies, of all the barbarisms, of all the nonsense, of which an art can be capable, not one has been avoided by the masters on the other side of the Channel." In support of the justice of this opinion M. Müntz brings ample proofs.—Two etchings after Rembrandts in the Hermitage, by M. Massaloff, have an accompanying text by M. Émile Galichon.—A paper on Byzantine Architecture in France is an extract from an unpublished portion of the third edition of M. Alfred Michiel's work, *L'Architecture et la Peinture en Europe du IV^e au XVI^e Siècle*, which is on the point of appearing.

Herr R. Bergau writes to the *Zeitschrift für bildende Kunst* to say that there occurs in the fourth number of *Nürnbergische Künstler* (p. 47) for the year 1831 the unsigned statement that the celebrated "Gitter von Messing" made by Peter Visscher and his sons for the grave of Fugger, at Augsburg, but subsequently purchased by the town council of Nürnberg, and placed in the town-hall, to be eventually (in 1806) sold, was not melted down as supposed, but was then in the garden of a private person at Lyons, this person refusing offers for the purchase of the work in question made to him by King Louis I. of Bavaria. Herr Bergau has vainly endeavoured to obtain any information on the subject, and communicates the above to the public in the hope that some one else may be more successful in discovering the present fate of this valuable treasure.

A second edition of M. Georges Duplessis' useful work, *Les Merveilles de la Gravure*, has recently appeared.

A very considerable collection of works of art and curiosities, having principally a local value, is to be sold by auction at Danzig on September 26 and 27. The collection was made by Professor Schultz, director of the art-school at a time when Danzig was richer than it is at present in this class of objects. The catalogue contains, amongst other paintings, four remarkable portraits by the old Danzig painter, Andreas Stech; many miniatures of value, chiefly of kings of Poland and Danzig patricians; ebony caskets distinguished for the beauty of their workmanship, ivory reliefs, and old glass. A separate division is formed by old Chinese, Japanese, Meissen, and Berlin china, and much of the antique furniture is said to be of genuine and considerable value. Professor Schultz has been obliged to resign his post on account of decaying health.

New Publications.

DICTIONNAIRE ARCHÉOLOGIQUE DE LA GAULE. Époque celtique. Publié par la Commission de la Topographie des Gaules, sous les auspices du Ministère de l'Instruction publique. 3^e fascicule. In-4, avec 9 planches, gravées et légendées.

DANETT, Alfred. Ranolf and Amohia; a South Sea Day Dream. Smith, Elder, and Co.

GIRARDIN, Émile de. L'Égale de son fils: les droits de la femme et les devoirs de la mère. Paris: Michel Lévy.

HEIGEL, C. Th. Ludwig I., König von Bayern. Leipzig: Duncker und Humblot.

JACOBY, Dr. Johann. Gesammelte Schriften und Reden. Hamburg: Meissner.

KEATS'S ENDYMION. Illustrated by E. J. Poynter, A.R.A. (Six Engravings on steel.) Moxon.

PRADÈRE, O. La Bretagne poétique: traditions, moeurs, coutumes, chansons, légendes, ballades etc. Paris: Librairie générale.

SCHÖNE, Richard. Griechische Reliefs aus Athenischen Sammlungen: xxviii Tafeln in Steindruck, mit erläuterndem Text. Leipzig: Breitkopf und Härtel.

STIELER, Rob. Illustrationen zu Franz Schubert's vorzüglichsten Liedern. (In Farbendruck.) Leipzig: Arnoldische Buchhandlung.

Theology.

THREE LECTURES ON BUDDHISM. By the Rev. Ernest T. Eitel. Hong-kong: at the London Mission House. (Trübner.)

THE WHEEL OF THE LAW. By Henry Alabaster, Esq. Trübner, 1871.

MR. EITEL has intended to give, in this pamphlet, a complete picture of Buddhism. The first lecture is a *résumé* of its history, the second of its doctrine, and the third is an account of the various forms it has assumed in the different countries where it prevails.

It may be supposed that these lectures, delivered in China, probably before a very mixed audience, on a subject which would fill volumes, cannot have great scientific pretensions; and the author himself refers such of his readers as may desire to study the subject more deeply to another work, to which the one before us may serve as an introduction (see preface). Our business therefore is only, in the interest of the general reader, to enquire if the author has been sufficiently complete in his exposition, exact in his appreciation, and impartial in his judgments. He appears to us to have fulfilled satisfactorily these various conditions, and with regard to the third, to deserve especial praise, seeing that his publication is in reality a polemical work.

For he not only proposes to set before us the history and doctrines of Buddhism, although that may be his principal and avowed object: he also intends to weigh its merits, and to show that this religion, professed by so great a number of men, cannot satisfy the wants of the human soul, as a rival of Christianity. This set purpose makes itself felt throughout the work, but does not prevent the author from doing justice to his adversaries; he points out the moral truths which Buddhism has proclaimed, and even the scientific laws of which it appears to have had a presentiment.

In his first lecture, Mr. Eitel is engaged on the similarity which exists between the life of Buddha and that of Christ. The subject does not cause him uneasiness, because, according to him, the Buddhistic writings on which this similarity is founded are posterior to the formation of the evangelical canon. Although the age of the different Buddhistic treatises is still far from being fixed, yet it is certain that the legend of Câkyamuni was gradually developed; and that in its latest form it is comparatively recent. But the ease with which it is possible to explain this similarity should not be a motive for exaggerating it. Why say, for example, that Câkyamuni was baptized? Is it intended to connect the Gospel narratives (Matt. and Luke iii., Mark and John i.) with the episode of the two currents of hot and cold water which two serpent-kings cause to descend from heaven and wash the body of the newly born babe? (*Lalitavistara*, chap. vii.) We need not, in order to avoid the error of those who see in Christianity a mere imitation of Buddhism, fall into the opposite extreme. Christianity and Buddhism are perfectly independent of each other. Still, one cannot

but admit that there exists in certain doctrines, in certain narratives, and especially in certain exterior institutions (such as monachism) a similarity which may lead one to infer a mutual influence. But in explaining these points of connection, our first care should be to define them, not to multiply them unnecessarily.

In the third lecture, which contains the newest matter, and in which northern Buddhism is described in an interesting manner in its most curious and most popular legends, the author, in speaking of the Adi-Buddha, returns to the important question which he has already touched upon more than once, that of Buddhistic Atheism. The last king of Siam was right when he said to a European traveller (Bastian, *Reisen in Siam*, p. 20) that the doctrine of the Adi-Buddha (primitive or primordial Buddha) resembles Christianity more nearly than any other. It certainly satisfies monotheistic tendencies up to a certain point; but this metaphysical speculation cannot be the basis of a true Theism. Buddhism, it must be admitted, is a religion without a god: it places in man, and in him alone, the elements and means of deliverance. The supreme justice which it recognises, and which determines the destinies of men, the Karma, is an impersonal, unconscious force, which we might call blind were it not for the harmony which it ordains between human fortunes and actions. In considering all great questions, the divinity, the Nirvâna, we must carefully distinguish between popular superstition, which instinctively rejects the negative conclusions of a subtle and obscure philosophy, and this philosophy, which deduces with inexorable rigour consequences from principles. In Buddhism, more than in any other religion, there is a great difference between what the vulgar believe and what the learned teach; for in no religion is science more profound, more inaccessible, more impenetrable, and at the same time more ready to adapt itself to the belief of the crowd. Buddhism is not an idolatrous religion, and yet there is no religion in which idolatry is more general. It is, or at least it has become, a nihilistic religion; and yet the mass of its followers are far from comprehending or admitting the negative conclusions of its most learned doctors.

The *Wheel of the Law* is properly the name of Buddha's first discourse, which contains the essence of his doctrine, and may, by extension, designate the entire system. Mr. Alabaster has nevertheless given this title to a volume which is neither a special treatise on the fundamental *Sûtra* nor a complete exposition of Buddhism; but he justifies his appropriation of the name by the plan of his book, which presents this religion to us under three different aspects—1st, the spirit of reform and of philosophical transformation; 2ndly, the maintenance of tradition; 3rdly, superstitious exaggeration. As the diversity of these subjects admits of a rather vague and general title, the author could not find a more expressive one than that which he has chosen.

This book treats solely of Siamese Buddhism. The author himself declares that he is not a "scholar"; but knowing Siamese thoroughly, and having long lived among the Thai, he has given us the fruit of his studies and observations. Such assistance rendered to erudition by men who do not make it their profession may be most useful, but its value is in proportion as the authors are more or less acquainted with the works of the learned. Mr. Alabaster acknowledges this himself in his preface. An educated and intelligent traveller may translate a Burmese or Siamese religious book: if the book is original, well and good, but if it is merely a version of a Pâli book, the work is no longer of the same importance.

The volume before us is not, properly speaking, a book; it is a collection of three distinct pamphlets, completely

independent of each other. The preface tells us under what circumstances they were composed, and why they were brought together; it concludes with a defence of Buddhism from the strictures of M. Barthélemy-St.-Hilaire. Mr. Alabaster reproaches the French critic with having written in a spirit of partiality, with attributing to Buddhism social and political consequences which are not traceable to it, and finally with judging the Buddhist religion in too unfavourable a manner. We cannot here enter upon the grave questions raised by this controversy; but we shall presently have occasion to make an observation which proves how difficult it is to carry on discussions of this kind. For the present let us notice the three pamphlets which compose *The Wheel of the Law*.

I. "The Modern Buddhist" appeared separately in 1870; it is therefore no longer a new work. Mr. Alabaster hoped to prepare his second edition with the assistance of the Siamese author, late minister of the last king of Siam, and a sharer in the projects of reform entertained by his sovereign: but the death of this distinguished man has thrown Mr. Alabaster on his own resources. The new edition contains but little fresh matter. The following, however, is both new and rather curious. Dr. Caswell had observed to the learned Siamese that the triumph of Buddhism, by condemning all men to celibacy and the convent, would end in the extinction of the human race (it is to be remarked that this reproach was in India addressed to Buddha himself, from the beginning). The Siamese, being embarrassed, answered in an evasive manner, saying, among other things, that Buddha had not intended to found a universal religion; yet universalism appears to be one of the pretensions of Buddhism, and is a feature in which it resembles Christianity. On this subject Mr. Alabaster makes the following remark:

"Had I been in our author's place, answering from a Buddhist point of view, I should have said that, as Buddha recognised that all existence in this world was unsatisfactory and miserable, the suggested cessation of the renewal of the species was not a matter to be at all deplored."

Has Mr. Alabaster considered that, by these words, he has given an advantage to M. Barthélemy-St.-Hilaire, who reproaches Buddhism with its "incurable despair," its "fanatical aversion for this life," its "inconsolable sadness in a world which it does not understand"? (*Le Buddha et sa Religion*, pp. 141 and 161). Does he think that a religion founded on such notions is favourable to the development of the human faculties?

II. "The Life of Buddha" is the translation of a Siamese book entitled *Pathomma sampho Hiyam*, from which Pâlégooix borrowed the résumé of the life of Buddha which he gives in his *Description du Royaume Thai* (ii. pp. 1-23). By this translation Mr. Alabaster has furnished us with a Siamese life of Buddha, as Bigaudet has given us a Burmese life, Foucaux a Thibetan and Nepaulese life, and Beal a Chinese life (see *Academy*, vol. iii. p. 46-50). We need not point out the interest attached to these different versions of the same subject. It is remarkable, for example, that the Siamese work, though differing in a number of details from the Lalitavistara, is constructed on the same plan; that is to say, it embraces the same period of the life of Buddha (the first thirty-five years), whilst the Burmese work includes his whole life. But here an all-important question arises. Is this work purely Siamese? We already know that the Burmese book translated by Bigaudet,* the *Mâlâlankaravatthu*, is of Pâli origin. The Siamese work translated by

* There exists another translation by the American missionary, Chester Bennett, more complete than the first edition of Bigaudet. It is strange to find no allusion to this work, which, indeed, did not appear separately, but was published in the *Journal of the American Oriental Society* at New York (vol. iii.).

Mr. Alabaster appears to us a similar case ; for there exists a book in Pâli, the *Pathama Samboðhi*, of which the Siamese title quoted above is only an alteration (the word *jūāna*, represented, according to Mr. Alabaster, by the termination *yan* in the Siamese title, does not figure in the Pâli). There are, in the National Library in Paris, sheets of this work forming nearly a complete copy. On comparing this manuscript with the translation of Mr. Alabaster, we notice that the division into chapters is not the same ; but that the two works are very similar, although the correspondence is not always exact. It is difficult to admit that one of the two works is not derived from the other. The Pâli work is not canonical ; but what is its place in Pâli literature ? What relation does it bear to the Siamese work ? These are points to be cleared up ; and we recommend them to the notice of Mr. Alabaster, in case he should, with the perseverance which appears to belong to his character, set himself one day, as he expresses a hope of doing, to revise and perfect his book.

III. The "Pra-Bat" (Holy Foot) contains two parts : the journey of the author to a celebrated place of pilgrimage, and the description of the sacred foot-print. The first is calculated to interest all readers ; concerning the second, Mr. Alabaster does not deceive himself, and expects but a moderate success. We may take a lively interest in Buddhism itself, and but very little in the "Holy Foot." Burnouf said that this point would always be of secondary importance ; but he said this at the conclusion of a long and minute study of the 65 signs of the Pra-Bat (*Lotus de la bonne Loi*, p. 623, &c.). Mr. Alabaster, who makes a similar observation, nevertheless gives a plate representing the 108 signs of the same Pra-Bat. This number of 108 seems to be the exact number of these signs, though for a long time this was an undecided point—Low reckoning 96, Burnouf 69, Baldaeus 68. Does the merit of the number 108 consist, as Mr. Alabaster suggests, in its being the product of the square of 2 multiplied by the cube of 3 ? It is impossible to say ; but it is certain that this number is held in great esteem by the Buddhists, especially those of the north : the *Kandjour* enumerates the 108 names of Manjuçri, of Devi, &c., and we also find in the Mahâbhârata the 108 names of the sun. The 68 signs of Burnouf may be brought to very nearly as many as 108 ; for, by counting the figures to which he gives but one number, but which, in Mr. Alabaster's plate, are each repeated a certain number of times, we arrive at the number 106, or even 107, if we add the central and principal sign, the Çakra (the wheel), which Mr. Alabaster does not count. Nevertheless this coincidence is more apparent than real. Several signs, mentioned by Burnouf, appear not to exist in Mr. Alabaster's drawing ; he also divides the signs which Mr. Alabaster unites : thus the sun and the moon count for two signs in Burnouf's list, for a single sign in Mr. Alabaster's. Thus much may be inferred from these divergencies : the normal number is 108, and certain signs are found in all the drawings ; but with regard to several, there exists a certain liberty ; they may be added, or suppressed, or one may replace another.

To verify this conclusion, we ought to be sure that all the drawings of the Pra-Bat are alike ; that, for example, that represented by the plate in Mr. Alabaster's book, and which is to be seen in a convent at Bangkok, is identical with "the Burmese foot-print now in the British Museum" (p. 289), and not only that the number of the signs is the same. The last word has not yet been said on the subject of the Pra-Bat, but Mr. Alabaster has advanced the question by furnishing as the basis of new studies a drawing, which, being made from a photograph, is perfectly reliable.

LÉON FEER.

Intelligence.

The new edition of Delitzsch's *Genesis* is enriched by three excursus on points of Biblical geography from the competent pen of Consul Wetzstein. The writer identifies "Hobah, which is on the left hand of Damascus" (Gen. xiv. 15) with a fountain called Höba near Karjetén in the "land of Menâdir" (the district east of Hasîâ and Hîms). He also proves that Zoar was not on the peninsula which juts out into the Dead Sea from the east (as Robinson and others supposed), but on the south-east end of the lake in the Gor-es-Sâfa ; and that Kadesh (Gen. xiv. 7) is not Ain Kudeis, which is too far to the westward, but Kâdûs, a station on the southern caravan-road, between Hebron and Zoar. The last identification rests on the authority of the traveller Maâdisi (tenth century), who was a native of Jerusalem, and lived before the pre-Islamic civilisation of Syria had been seriously injured. The second excursus should be compared with a paper by Dr. Grätz in the August number of his *Monatschrift*, who arrives at the same conclusion as Dr. Wetzstein by a comparison of Biblical passages. He thinks that "the city of palm trees" (Judg. i. 16; iii. 13) is Zoar, which is actually called "villa palmarum," or Palmer, Paulmier, by the Christian writers of the Crusades. In Deut. xxxiv. 3, he assumes a transposition (cf. Gen. x. 14), the words "city of palm trees" being unnecessary and contrary to usage, if taken as an epithet of Jericho. The site of Zoar is defined by Deut. l.c. and Josh. xv. 2, 3 ; also by Ezek. xlvi. 10; xlviii. 28, where Tamar must be a place at the south end of the Dead Sea, and, as appears by a comparison of passages in Eusebius, is to be identified with Zoar. Two other identifications are proposed for the first time by Dr. Grätz, (1) that Shur = Geshur (?), and (2) that "the smooth mount which goes up towards Seir" (Josh. xi. 17; xii. 7) is the well-known salt-hill of the south-west end of the Dead Sea.—We notice that Consul Wetzstein pays a deserved compliment to Mr. E. H. Palmer for his exploration of the Negeb or "south country" of Palestine.

Dr. Paul Kleinert, Professor of Theology in Berlin, and well known as one of the contributors to Lange's *Bibelwerk*, is the author of a volume entitled *Das Deuteronomium und die Deuteronomiker*. His point of view in the present work is not apologetic but critical. His position as a critic, however, is isolated in the extreme (he is anticipated, it is true, by Stähelin), for while he fully admits that Deuteronomy cannot have been written in the age of Moses, he thinks it may still be in a sense Mosaic, as being a reproduction of ancient laws, some of which were committed to writing by Moses himself (p. 238). The compiler was probably Samuel, the second Moses of the Israelitish religion. After showing that the book of Deuteronomy is composed of a code (ch. v. to ch. xxvi.) and a historical setting, Dr. Kleinert discusses at some length the relation of this code to the middle books of the Pentateuch. The characteristics of the former differ widely from those of the latter, though not more so perhaps than may be accounted for by the different points of view from which the same subjects are regarded. Besides, points of contact between the two legislations are not wanting (p. 44). The following passages are shown to be praedeuteronomic, Ex. xx.-xxiii., xxxiv. 11-26, xix. 5 f., xiii. 1-13, Lev. xvii. 8 f., Num. xxxiii. 50 ff., iii. 12 ff. ; also the principal directions in Lev. xviii.-xx., the contents of Ex. xii. 1-14, 21-23, 43-50, Lev. xiii., xiv. ; and the following post-deuteronomic, Lev. xi., xv. 16 ff., xvii. 15 ff., xxii. 17 ff., xxiii., xxv. 39 ff., xxvii. 26 f., 30 ff., Num. xv. 37 ff., xviii. 15 ff., 21 ff., xxviii., xxix. An attempt is then made to show that there is little to be said for and much against referring Deuteronomy to the reign of Josiah ; cp. the command to extirpate the Canaanites and Amalekites, the friendly mention of Edom and Egypt, &c. Thus the way is smoothed for the admission of an earlier date, not indeed in the age of Moses, for a complete social revolution must have intervened between the oldest extant laws and Deuteronomy (p. 128). The only date which suits the historical references is the conclusion of the period of the judges ; cp. the mention of the elders of the city as judges ; the law of the king ; the worship of the sun and moon ; and the idea of religious centralisation, though the religious centre itself is conceived as fluctuating—it is "the place which," from time to time through a prophet, "the Lord thy God shall choose." In the concluding dissertation it is shown that the historical passages which form the setting of the code give no reason for referring them to a different date. An appendix contains a most useful phraseological index, with the twofold object of ascertaining how far the style of Deuteronomy is uniform, and how far it has influenced that of other Old Testament books. On the whole, though Dr. Kleinert's work can hardly be called satisfactory, it will be valuable to the student from the completeness with which the data for forming an opinion are presented, and the clear historical summary of previous hypotheses in the introduction.

We understand that Messrs. Clark, of Edinburgh, intend to publish a supplement to the translation of Cremer's *Lexicon to the New Testament*, containing the additional matter inserted in the second edition of the German work (1871-72), together with corrections, &c.

Contents of the Journals.

Journal of the American Oriental Society (No. 1 for 1872).—One of Mr. Burgoon's many startling assertions in his work on *The Last Twelve Verses of the Gospel according to St. Mark* (see *Academy*, vol. ii. pp. 518, 519) is subjected to a searching examination by Mr. Ezra Abbot, a professor at Harvard University, and one of the contributors to the *North American Review*. In one of his concluding dissertations, Mr. Burgoon has maintained that certain "notes of superior antiquity," which he specifies, "infallibly set Cod. B before Cod. N, though it may be impossible to determine whether by 50, by 75, or by 100 years" (p. 293). Prof. Abbot shows conclusively that Mr. Burgoon's arguments on this head are frequently misleading, and due to a strange misapprehension of facts. He allows, however, that some new critical material is amassed in the body of the work, and that some special topics, as the so-called Ammonian sections, are discussed in a satisfactory manner. But "his conclusions are often strangely remote from his premises," and he writes "in the spirit of a passionate advocate, rather than that of a calm inquirer."

New Publications.

- AUBER, L'Abbé. *Histoire et Théorie du Symbolisme religieux, avant et depuis le Christianisme.* 4 vols. in 8vo. Paris : Franck.
- COLENSO, the Right Rev. J. W., Bishop of Natal. *The New Bible Commentary*, by Bishops and other Clergy of the Anglican Church, critically examined. Part II. Longmans.
- CORPUS APOLOGETARUM CHRISTIANORUM SAECULI SECUNDI. Rec. Otto. Vol. IX. Jena : Mauke.
- LÜDEMANN, Lic. Privatdoc. Dr. Herm. *Die Anthropologie d. Apostels Paulus u. ihre Stellung innerhalb seiner Heilslehre. Nach den vier Hauptbriefen dargestellt.* Kiel : Universitäts-Buchhandlung.
- ZITTEL, Pfr. Emil. *Die Entstehung der Bibel.* Carlsruhe : Braun.

Philosophy and Physical Science.

Kant's Critical Philosophy for English Readers. By J. P. Mahaffy, A.M. Vol. I. Part I. and Vol. III.

MR. MAHAFFY'S exposition of Kantism for English readers is very well planned, and (as far as can be judged from the instalment before us) satisfactorily executed. His work will consist, when complete, of three volumes ; two containing an abridgment and explanation of the *Kritik*, together with some controversial matter ; and the third consisting of a translation of the *Prolegomena*, together with some portions of the *Kritik*. The *Prolegomena* is more popularly written, and much better adapted to give the student a general grasp of Kant's aim, method, and results than the *Kritik*: and Mr. Lewes (*History of Philosophy*) recommends the English reader to begin with it. But many portions of it are not thoroughly intelligible without some knowledge of the earlier treatise : yet the prolix obscurity of this is calculated to repel even an earnest reader. In order to give a thorough grasp of the general features of Kant's system with the least possible waste of labour, we want a good popularisation of the *Kritik* to be read along with the *Prolegomena*: and this is just what Mr. Mahaffy proposes to give.

I have said that Mr. Mahaffy's execution of this scheme is adequate *as far as can be judged*: but he would be the first to allow the importance of this qualification. He has as yet only expounded the *Transcendental Aesthetik*: and this is precisely the portion of Kant's system which English readers have pretty well contrived to understand. Indeed Kantian views as to Time and Space have been avowed by some writers (e.g. Whewell) whose works show no sign of their having penetrated any further into Kantism. But I cannot mention one Englishman, even among the distinguished persons who have spoken of Kant with an air of thorough familiarity, who has given the least evidence that he really understood the *Transcendental Analytik*. Certainly neither in Hamilton's criticism of the Categories and Ideas (*Discussions*, pp. 16, 17) nor in Mansel's elaborate discussion of Substance and Causality (*Prolegomena Logica*, c. v.) is there

any such evidence. So that if Mr. Mahaffy succeeds in giving a really clear and intelligible exposition of this part of the *Kritik*, he may fairly claim to have achieved a work hitherto unattempted.

The commentary already published does not perhaps give much scope for the display of expository talent: in fact, it is more an abridgment, somewhat rearranged, than an exposition. But it is certainly easier to read than the original, merely because it is shorter: and both here and in the translation of the *Prolegomena* the English is clear and vigorous, and the rendering, so far as I have examined it, very exact. The slight licenses which Mr. Mahaffy has allowed himself (consisting chiefly in dismemberment of the most unwieldy sentences) are always used with good taste: and only in one case (vol. iii. p. 85) has the sense of the original suffered in the reconstruction. A list of the few passages in which Mr. Mahaffy's rendering has appeared objectionable is subjoined.*

In the commentary, perhaps a little more explanation of Kant's special phraseology would be advantageous. For example a beginner needs some introduction to Kant's complicated and perplexing use of "object" and "objective." He can scarcely be expected to guess that "objektive Gültigkeit" means no more than "nothwendige Allgemeingültigkeit," and hence that the same principle or element of cognition may be called "subjective" or "objective" according as we view it. I admit that it is very difficult to know when to explain a term, if such explanation involves the exposition of a doctrine. In one passage where Mr. Mahaffy attempts to explain by an example Kant's use of "Unconditioned," his accommodation to the beginner seems rather misleading. He says :—

"We cannot comprehend our mental phenomena without presupposing necessarily a substance called Mind, beyond and beneath all its various manifestations. This illustration will explain what Kant means by the necessary belief in the Unconditioned."

Now this certainly seems to confound the functions of the (Kantian) Reason and Understanding. What the Understanding necessarily adds to sense-phenomena in order to render them intelligible is the notion of Substance = something perdurable. What the Reason seeks in the world of experience and cannot find there is Absolute Subject = something that cannot be conceived as predicate. That the pre-Kantian metaphysic combined the two notions, and that it is a peculiarity of Kant's system to argue the illegitimacy of this combination, Mr. Mahaffy is of course aware: but if he had realised how very difficult it is for a beginner to seize and retain Kant's view on this point, he would hardly have used this illustration.

I proceed to notice some controversial points.

I. At the end of vol. iii. Mr. Mahaffy reprints his translation of suppressed passages in Kant's first edition of the *Kritik*; partly to justify his defence of Kant against the current charge of retracting in the second edition his original

* Vol. i. p. 16.—"If our intuition must conform to the nature of its objects, how can we know anything *a priori* about these objects?" Kant says, "*von ihr*" = "about the intuition;" and the sequence of his argument requires this.

Vol. iii. p. 27.—"It must proceed beyond the concept to *that which contains the corresponding intuition*." Surely it must be "that which the corresponding intuition contains." The German is of course ambiguous.

P. 39.—"The mere natural, though *in spite of its truth* not unsuspected cognition *a priori* which lies at the basis of [Metaphysics]." Kant says, "obgleich wegen ihrer Wahrheit nicht unverdächtige." The metaphysical affirmation is natural, but its validity nevertheless suspected.

P. 85 (last line but one).—"So far" seems meant as a translation of "so ferne" (so far as), and is in any case confusing.

P. 115.—The second sentence seems curiously confused.

P. 150, l. 4.—"Intuition" seems a clerical error for "function."

In p. 122, "Gesetzmäßigkeit" should be rendered "legitimacy" (and not "regularity"), as afterwards, p. 129.

I may add that in p. 155, l. 1, a "not" is omitted, where the omission may perhaps puzzle a beginner.

Idealism.* I have no doubt that the charge is unfounded, and that the "Refutation of Idealism" (second edition) has been gravely misapprehended: but I cannot but think that the author himself is somewhat to blame for this misapprehension. It appears (compare *Prolegomena*, § 13, remark ii. with remark iii.) that there are two quite distinct grounds on which Kant is disposed to argue the difference between his system and Idealism (whether Berkeleyan or Cartesian). First, that he allows the existence, *beyond experience*, of Things in themselves, causing, though not constituting, the matter of experience. Secondly, that *within experience* he gives no prerogative of certainty to the cognition of the Ego as an empirical object, compared with that of the Non-ego: rather he can demonstrate that the consciousness of my own existence in time involves and presupposes an immediate consciousness of the existence of material objects in space. Now Kant had a perfect right to call attention to these two points of difference: but it seems clear that (1) they have nothing to do with each other; (2) he exaggerates the importance of the first (for he does no more than substitute an *x* for the God of Berkeleyan Idealism); (3) he facilitates a confusion between the two by applying the same phrase, "things existing without us," both to the empirical and to the extra-empirical world.

II. Mr. Mahaffy thinks that he has effectually refuted the common error that Kant based the science of arithmetic on the intuition of Time (not Space). He says, with some naïveté, "Since the publication of my criticism on Kuno Fischer's *Commentary*, I think this position has tacitly been abandoned." It is time, then, to come to its support. We find in the *Prolegomena* (§ 10) that—"Geometry is based upon the pure intuition of space. Arithmetic accomplishes its concept of number by the successive addition of units in time." This seems sufficiently explicit: but Mr. Mahaffy only sees in it "a lurking doubt whether arithmetic may not be derived from time." He seems to rely for the opposite view on two passages in the *Kritik*: one in the Introduction (p. 10†), where Kant speaks of having "recourse to an intuition . . . our five fingers for example or . . . five points"; the other in c. i. of bk. ii. of the *Analytik*, where "five points placed one after another" are said to be "an image of the number five." But obviously here Kant is not separating *pure* from *mixed* intuition: he is merely indicating the common empirical examples to which we naturally refer in making evident to ourselves the principles of arithmetic: therefore *a fortiori* he has no occasion to specify the pure intuition which arithmetic requires. When he came to do this, he could not but specify Time, as the objects of the inner sense are numerable as well as those of the outer.

III. Mr. Mahaffy repeats (in the strongest terms) his assertion that Locke "completely anticipated" Kant's general division of Judgments. He refers to three of Locke's "kinds of agreement and disagreement between our ideas"—(1) Identity and Diversity, (2) Relation, (3) Coexistence: and says, "here are Kant's analytical, synthetical *a priori*, and synthetical *a posteriori* judgments accurately distinguished." It seems to me perfectly incomprehensible how any one who had read Locke's fourth book could make this assertion. First, Kant's analytical judgments do not correspond even roughly to Locke's affirmations of identity and diversity. These are only one species of what Locke calls "Trifling Propositions," which may more plausibly be

identified with Kant's Analytical Judgments; but even here the correspondence is very rough, because Locke would only call "trifling" those analytical judgments in which the analysis is so obvious that its statement is no gain to our knowledge. In fact, we find that he gives, under the head of Relation, propositions clearly (by his own account of them) analytical: e.g.—"where there is no property there is no injustice;" "no government allows absolute liberty" (bk. iv. c. iii. § 18). Secondly, Locke's distinction of Relation and Coexistence is in itself most unsatisfactory. It is not only, as he himself says, that coexistence is a kind of relation; it is also true that from one point of view all propositions affirm coexistence, i.e. logical coexistence of predicate with subject. It may be said that Locke means to restrict the term to the coexistence of attributes in a substance: and certainly his express examples are all of this kind. But in his original account of it he only says that "this belongs particularly to substances." And it is a curious illustration of the vagueness of his whole view that he actually analyses the same piece of intuitive knowledge—that the angles of a triangle are equal to two right angles—in two different ways, so that it must almost necessarily belong to two different classes. Compare c. i. § 2 and c. ii. § 2. In the latter passage the "agreement" is between the three angles of a triangle and two right ones, and is obviously an agreement of relation: in the former it is said to be between "equality to two right ones" and the three angles, and I do not see how Locke could have classified this except as an agreement of coexistence. But all this is unimportant beside the fact that the affirmations of coexistence with which Locke is chiefly concerned are synthetical *a priori*. How Mr. Mahaffy can have overlooked this, I cannot conceive (cf. c. iii. §§ 8–16 and c. vi. §§ 6–10). It is true that Locke says, and is indeed concerned to maintain, that there are "very few" such certain universal affirmations of coexistence: but he still allows that there are a few cases of primary qualities known to be necessarily coexistent, and more of "repugnancy to coexistence" cognisable *a priori*. Indeed, one may almost say that no better way could be found of proving to a beginner the difficulty and merit of discovering this classification of Kant's than a careful examination of Locke's fourth book.

IV. Nearly one-half of Mr. Mahaffy's first part is occupied with a polemic against the Empirical or Associationist theories of Space and mathematical truth, partly new and partly reprinted from the introduction to his translation of Fischer's *Kant*. It is probably desirable, in an English exposition of Kantism, to exhibit its relations to the mode of thought at present prevailing in England: but one cannot but wish that the treatment of the subject had been somewhat broader, with less tendency to resolve itself into a private wrangle with Messrs Mill and Bain. One wishes this the more because the view that our author combats, which I may call pure psychological associationism, already seems almost antiquated, owing to the extensive influence exercised of late years by the theory of Evolution through successive generations, of which Mr. Spencer is the leading expositor. Mr. Mahaffy's proposal to call his opponents "the physiological school" seems thus peculiarly infelicitous: since to most physiologists at the present time the older Empiricists appear to err as much in considering the mind as characterless at birth as the still older Transcendentalists did in considering it as transcendently characterized. However, his statement of the issue between Kantism and Associationism must be allowed to be fair, with one or two qualifications. First, he makes, as all Kantists, the assumption which to all but Kantists seems so baseless, that while the universal element in cognition is rightly referred to the

* Mr. Mahaffy does not always bear in mind the difference of editions. E.g. he says (*Prolegomena*, p. 23) that a passage is "transcribed verbatim from the *Kritik* without a single explanation," whereas it only occurs in the second edition, into which it was transferred from the *Prolegomena*.

† I quote from Mr. Melklejohn's translation. This passage is also in the *Prolegomena*.

mind, the particular, variable element *must* be due to foreign causes. He urges that the latter element cannot be changed at will by the mind: but then no more can the former. Our apprehension of things as extended is just as independent of our volition as our apprehension of them as coloured and heavy. Again, he claims that the Kantian theory is "not more complex" than the other, and is the only one which explains all the phenomena. His argument is that the Empiricists have to assume Memory and Expectation and the laws of association, and do not explain these: whereas Kant refers all association to the synthetical unity of apperception. But the elaborate apparatus of mental forms by which Kant is said to "explain" our experience does not become any simpler because these forms are, so to speak, strung on one thread and called modes of apperception. The different characteristics of cognition which are thus referred to different transcendental causes remain as separate and irreducible after as before the reference. Now the Associationists do at any rate attempt a certain reduction: they try for example to derive the "external sense" of Kant from the internal, and to exhibit Cause and Substance as results of different applications to phenomena of the same fundamental laws of association. Thirdly, our author forgets in dealing with Mr. Mill that the latter's exposition naturally faces not Kantism, but Common Sense: and so is encountered by the belief (which Kantism and Empiricism agree in rejecting) in the independent existence, apart from the mind, of Percepts, not Things in themselves. It is this that he calls a "belief in an external world," using that unhappily ambiguous term not in a spatial sense, but to signify "independent," "existing out of perception." Hence the charge that he neglects the "conviction that *present* objects are given as external" is beside the mark, as extra-perceptual existence does not come into question in respect of *present* objects of perception, considered as present.

This agreement between the two schools in restricting cognisable reality to the world of possible experience reduces the controversy about Space within manageable limits. The point at issue is merely the universality and necessity of a particular element of cognition. Still even this narrower question is found to resolve itself into two, of which the logical connection is somewhat disputable. The "necessity" of geometrical truth is commonly (and by our author) thought to be bound up with the "originality" of our apprehension of Space. But Mr. Mahaffy himself in a suggestive passage distinguishes "subjective" and "objective" necessity: and it is quite conceivable that the notion of Space may be a necessary element of our clear and matured cognition, and yet not have been possessed by the mind at first in its present form. Now the enquiry into the *nature* of the notion of Space is usually so mixed up with the enquiry into its origin that, when an Empiricist speaks of "analysing" the notion, it is not easy to say what sort of an operation he means: whether the analysis is introspective and immediate, disclosing the elements of which the notion is seen, on reflection, to consist: or whether it is a hypothetical process of reasoning by which the psychological antecedents of the notion in the remote past are conjectured. As I understand the Empiricists, they argue that the two processes lead to similar results and so support and confirm each other. Hence it is scarcely fair to describe Mr. Bain's assertion, that "the perception of space *means* muscular sensation," as "boldly begging the question": he is merely stating the results of his introspective analysis as an argument in favour of his hypothetical synthesis. If Mr. Mahaffy finds on reflection that *his* notion of Space, so far from resolving itself into muscular sensation, is not even inseparably associated with it, Mr. Bain's hypothetical

account of its origin naturally appears to be slenderly supported. Still, when he in his turn asserts that "it is matter of fact that the image on the retina of every eye is originally perceived as extended," he clearly goes beyond all possible evidence. An absolutely decisive experiment as to the state of an infant's consciousness can never be made. The best evidence we can collect is derived from the cases of those who, born blind, have acquired vision when grown up. One such case—Dr. Franz's—is given here at some length, and, as far as it goes, is clearly in Mr. Mahaffy's favour.

On the other question of the intuitive universality of mathematical judgments it is scarcely possible to say anything new: but one of our author's arguments deserves notice. Granted, he says, that we have had much general experience of things extended and numbered before we frame mathematical judgments, there is no evidence that we have definitely abstracted and attended to the precise notions which we conjoin in these judgments: or at any rate that we have done this with sufficient frequency to form the indissoluble link of association. This argument is strongest in the case of geometry: where the Empiricists admit and indeed earnestly maintain that the exact lines and circles to which our judgments relate have never been presented in experience. When Mr. Mill is forced to suggest that the empirical association which has given the appearance of necessity to these judgments has been "Induction by method of Concomitant Variations," one feels that this dexterous and persuasive reasoner must be very hard pressed.

H. SIDGWICK.

BASTIAN'S ETHNOLOGICAL COLLECTIONS.

1. *The Laws of Various Races.* [Die Rechtsverhältnisse bei verschiedenen Völkern der Erde. Ein Beitrag zur vergleichenden Ethnologie.] By Dr. A. Bastian. Berlin : 1872.
2. *Contributions to Ethnology and its Derivative Studies.* [Beiträge zur Ethnologie und darauf begründete Studien.] By Dr. A. Bastian. Berlin : 1871.
3. *Ethnological Investigations, &c.* [Ethnologische Forschungen und Sammlung von Material für dieselben. Erster Band.] By Dr. A. Bastian. Jena : 1871.

FEW writers, living or dead, have done more than Professor Bastian of Berlin to convert the study of civilisation from a branch of speculative philosophy into a branch of positive science. To general students, however, his voluminous works are little known and almost inaccessible. His opinion is that ethnology is as yet only passing beyond the stage of accumulating and co-ordinating data, from which systematic theories are at some future day to be worked out. Thus his vast labours have been and still are so consistently carried on among the foundations of his science, that the literary public seldom even sees his head above ground. Dr. Bastian's most satisfactory ethnological publications, such as his great work, *Der Mensch in der Geschichte*, published in 1860, consist for the most part of masses of materials collected and grouped under their proper headings, with short introductions to acquaint the reader with the author's views as to each topic. Were the process carried a stage farther, by shaping these ideas and facts into a systematic whole, the book would become a standard treatise, instead of a mine of materials for the writers of standard treatises. But Dr. Bastian deliberately prefers to leave his work in its incomplete stage for others, sacrificing to the eventual prosperity of his science much of the personal fame which rewards a popular style and method. To those who use his volumes with profit, we would only suggest this caution, not too readily to consider as original their own

inferences from Bastian's collections of evidence. These inferences are often conveyed to their minds in some shrewd hint in the introductory paragraphs, or are latent in the very arrangement of the materials, which plainly suggest the general principle they prove and illustrate.

Dr. Bastian's new volume, *Die Rechtsverhältnisse bei verschiedenen Völkern der Erde*, is constructed on this principle. Its introduction starts with the doctrine that—

"the organization of man, in the character of a ζωὴ πολιτικὴ, arranges itself in political institutions, which, as the regular result of uniform existence, must ever come to light under the same principles, except in so far as regards variations in the characters of varieties arising from the different characters of ethnological provinces. Thus the physical organism of man, as based on specific unity, is throughout similar in all its vital organs, although displaying itself in manifold varieties within the range of different anthropological districts, and under the influence of different climates," &c.

Taking the thoughts and habits of mankind as reducible by classification to results of general laws, Dr. Bastian collects and examines evidence on numerous topics of social science, such as the institutions of chieftainship, patriarchal and military, the laws of property, caste, marriage, slavery, commerce, &c. As examples of the value of evidence collected on this method, so as to display its inner meaning in its very collection, the following group (p. 185) may serve, which is in fact a compact little dissertation on the well-known custom of inheritance by the youngest son, referring it to an obvious natural cause, and showing it not to be limited to the Aryan race :—

"Bei den Tartaren erb (nach du Halde) der Jüngste, der im Vater-hause zurückbleibt, während die Älteren nach einander mit ihren Heerden fortgezogen und selbstständig geworden sind." "On trouve une pareille coutume en Bretagne dans le duché de Rohan, où elle a lieu pour les rotures." "Utdschigin (Feuerhüter) hiess der jüngste Sohn bei den Mongolen, als erbend." "Item, dass Inn der herrschaft Pfirdt gebreuchig das under den geschwisterigen und ehelicher geburt der jüngst son seines Vathers seligen hofreite oder behausung besitzet." "Le droit de Juveigneurie était général dans la Haute-Alsace (Bonvalot)." "C'était le plus jeune fils, qui héritait de la propriété paternelle dans le pays Grimberge en Brabant."

For an instance of the accompaniment of compiled facts with a theory to account for them, it may be mentioned that Dr. Bastian collects evidence as to that frequent but perplexing custom among savages and barbarians which prohibits parents-in-law from looking at or speaking to their children-in-law, and even compels them to go through an absurd pretence of not seeing one another. On this, he makes (p. 169) the suggestion (as to which we express no opinion except that it is ingenious) that the practice dates from an earlier state of the marriage-law, in which the wife was the property not of the individual husband, but of the family; so that under changed social conditions, the wife of the individual is practically secured in her rights, though formally her very existence is ignored.

Speaking in the name of ethnologists generally, we may venture to ask Dr. Bastian, in his future publications, to give not less but more liberally the theories and generalisations on which not merely their convenient use but their scientific value so much depends. In the *Beiträge* and the *Ethnologische Forschungen*, the absence of scheme, table of contents, and index, must make their matter only available to the few readers who will go through them for the purpose of extracting such passages as bear on their own particular lines of research.

EDWARD B. TYLOR.

Air and Rain: the Beginnings of a Chemical Climatology.

By R. Angus Smith, F.R.S. Longmans.

THIS work is the partial fulfilment of a task undertaken by Dr. Smith more than eight years ago; we say partial, because it consists of a reproduction of a number of separate

papers and notes, some of them published originally in the author's official reports, others read before various scientific bodies. It is more a collection of individual investigations than a scientific treatise exhibiting a definite plan, and the mutual connection of its several parts is far from clear. Thus we find under the heading of Rain a discussion of the determination of organic matter in the air, a problem which has nothing to do with rain. It is evident that the text-book of this important subject has yet to be written.

After saying thus much, we can bear full and free testimony to the value of what the author has given us, and the pains which he has taken to throw light on subjects hitherto so neglected, although of such vital interest to all. The general idea of air as taught in chemical text-books is that there is practically no appreciable difference in composition between the purest country air and the worst we find in towns, as the percentage differences as regards oxygen are all in the second decimal place. Almost all "open" air which Dr. Smith has tested contains 20·9 per cent. of oxygen; but in close confined places he finds considerably less, viz. 20·7 in the pit of a theatre, and even 18·27 in one mine specimen, the worst he has ever tested. Here then he takes his stand, and deals almost exclusively with these small quantities, which he makes more worthy of notice by quoting them as parts of a million. As he says :—

"Some people will probably enquire why we give attention to such minute quantities—between 29·980 and 29·999—thinking these small differences can in no way affect us. A little more or less oxygen might not affect us; but supposing its place occupied by hurtful matter, we must not look on the amount as too small. Subtracting 29·980 from 29·999, we have a difference of 190 in a million. In a gallon of water there are 70,000 grains; let us put into it an impurity at the rate of 190 in 1,000,000, it amounts to 13·3 grains in a gallon. This amount would be considered enormous if it consisted of putrefying matter, or any organic matter usually found in waters. But we drink only a comparatively small quantity of water, and the whole 13 grains would not be swallowed in a day, whereas we take into our lungs from 1000 to 2000 gallons of air daily."

The most important impurity is carbonic acid, and of its amounts in various places we have copious tables. From these we learn that when people speak of good ventilation in dwelling-houses, they mean, without knowing it, air with not less than 0·7 per cent. of carbonic acid. The mean amounts breathed ordinarily vary between 1·45, the average of several tunnels in the Metropolitan Railway, and 0·33, the proportion on the Scotch hills. It is not the carbonic acid in these small amounts which renders the air unpleasant to us. In towns it is no doubt sulphurous acid, but generally it is organic matter and gases arising from putrefaction, or from the ordinary processes of animal life. During a visit to a soda-water manufactory, the author found an atmosphere containing 0·19 of carbonic acid "very agreeable and not, at least in half an hour, to be distinguished from pure air." By other experiments in a closed lead chamber he had breathed much worse air than even this was, and as he says :—

"We are not yet able to say that 0·19 of carbonic acid caused no physiological effect; the absence of an effect which the sense of smell could detect did not hinder a very remarkable lowering of the pulse when air containing nearly 4 per cent. of carbonic acid was breathed. Here however a step is distinctly gained. We owe our discomfort to organic matter: although this has been said for years, it is not anywhere so fully proved as by the several facts now gained."

When we come to metalliferous mines, however, we find very different values for the composition of the air from that prevailing above ground. Thus, out of 339 analyses made by the author, the average was 20·26 per cent. of oxygen, thus showing a deficiency of 7·390 in a million, and only eleven per cent. of the specimens could be called normal air.

"The state of these mines must exceed all that we who live above ground can comprehend. We enter gradually, and cannot very well

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judge : if we leapt from the pure air into a close end in an instant, we should recoil with horror."

We next have a theoretical calculation of what the real composition of mine atmosphere must be, supposing a given amount of powder to be burnt in the day, followed by a notice of the microscopical examination of the solid contents of the air, most of which are crystals of nitre, &c. from the powder.

Among the most interesting portions of the book is the account of the personal experiments made in a closed lead chamber.

" After staying in the chamber for 100 minutes, the air had an unpleasant flavour or smell, and I came out : three persons entered at once, and pronounced it very bad ; I entered after a minute, and found it extremely bad. It seemed to me, however, that we are frequently exposed to air equally bad, although I have not found any daily life so much deprived of its oxygen as this must have been—reduced, that is, to 20 per cent."

After an experiment on the combustion of candles, Dr. Smith says :—

" We entered with candles and a spirit lamp. The lights were soon extinguished, and it was found impossible to rekindle them with matches : wooden matches were used, they refused to ignite. Still we breathed without difficulty at first, but a gradual feeling of discomfort appeared, of a kind which is not easily described : it was restlessness and anxiety without pain, whilst the breathing increased in rapidity. Afterwards gas was lighted, and it burnt with brilliancy."

They stayed in the chamber till the gas went out, when a feeling of faintness came on ; beyond this, and a feeling of closeness, nothing detrimental could be detected by the senses. A specimen of the air taken a few seconds after the door was opened contained 17·45 per cent. of oxygen.

Dr. Smith speaks of the constant struggle between our requirements of warmth and of ventilation, showing how putrefaction goes on but slowly up to 54°, then a sudden change is noticed, and it proceeds exactly as the temperature rises, not ceasing at a little above 130°. According as the temperature rises within any limits natural to this country, the necessity for ventilation is felt.

" It is therefore not right to demand as much air for ventilation on a cold day as a warm. The chemical action, and with it the feelings, demand warmth first above all things. It is the very first thing, and no function can go on without it. You may live for hours, days, or years, in badly ventilated places with more or less discomfort and danger ; but a draught of cold air may kill you like a sword, almost instantly."

We can only allude here to the author's proposed method of "minimetric analyses," viz.—the testing air by shaking it in a bottle with lime-water, and remembering the character of the precipitate formed, but he gives a very practical and useful rule.

*" Let us keep our rooms so that the air gives no precipitate when a 10*z*. bottle full is shaken with half an ounce of clear lime-water."*

The second portion of the work has reference to rain, and it is chiefly made up of tabular matter, introduced with very little discussion. The author treats of the general characteristics of rain, as given in the "Alkali Report for 1868," and justifies his views by 109 tables of analyses of rain, principally from the United Kingdom ; the first few of these tables do not give absolute amounts, but are comparative only, some one locality, in several instances Valencia, as a typical sea-coast place, being taken as the unit.

The rain from the sea contains chiefly common salt, but that this does not arise from spray is shown by the fact that it contains a larger proportion of sulphates to chlorides than is found in sea-water. Sulphates increase inland, and rise very high in large towns, and when the sulphuric acid increases more rapidly than the ammonia, the air becomes acid. Free acid is always traceable to combustion or manufacturing processes ; but as in manufacturing districts the

chlorides and sulphates may become neutral, acidity of itself is not a safe test.

The plates of crystals obtained by the evaporation of rain-water are very interesting. London rain leaves a mass of needle-shaped crystals which yield chloride of ammonium by sublimation. Manchester shows similar needles with the addition of coal dust, oxide of iron, and organic matter. Newcastle rain gives crystals of Glauber's salt, and rain from the west coast of Scotland common salt. Of course these results are not strictly comparative, as the degree of concentration of the solutions is not uniform.

The results obtained by the analysis of air led Dr. Smith to adopt an artificial method of collecting the impurities of the air by means of water. This is what he calls "air-washing." He fills a bottle containing a little pure water with the air to be examined, and shakes it. By this means he collects all the foreign bodies in the air, and can accumulate a sufficient quantity for examination by repeating the operation with fresh bottlefuls of air. This then is a most practical and useful process for all sanitary inspectors, as it is so simple, requiring hardly any apparatus. The results are extremely satisfactory, showing very considerable accordance with each other when the operation is repeated under similar conditions.

The book concludes with a number of short notes on various points discussed in the body of the work, and some remarks on smoke and ventilation. The former of these are out of place, as they clash with some of his earlier statements—a natural defect, and one almost unavoidable when so busy a man as Dr. Smith puts the results of his current labours into the form of a text-book.

R. H. SCOTT.

Notes of Scientific Work.

Physics.

The Colour of the Metals.—The rays thrown off from a coloured object are mixed more or less with white rays, because the light illuminating the object is incompletely decomposed. The colour of brightly polished metallic surface is usually invisible, because the coloration due to decomposed light is disguised by the more powerful reflected light. As moreover attempts to develop the actual colour of a metallic surface by reflecting white light a great many times from it fail through the loss of the coloured light by dispersion, Seeley has proposed a modification of the experiment. As, when white light is decomposed, the reflected coloured ray is complementary to that which is transmitted or absorbed, he recommends the examination of solutions of metals in a fluid that is without chemical action on them. For the alkaline metals he used dry liquid ammonia, in which they slowly dissolve, forming a solution that appears blue by transmitted light ; and he concludes therefore that the colour of these metals by reflected light is red like copper. (*Der Naturforscher*, No. 36, 289.)

It is announced in the *Journal de Sicile* that Donati has constructed a spectroscope of twenty-five prisms, which shows only the line C and a small portion of the red on either side of the line. This instrument, which enabled him to detect the line C on the centre of a solar spot, will be used for examining not only the protuberances of the edge, but more particularly those on the disc of the sun.

The Ultra-Violet Rays of the Spectrum.—Though under ordinary conditions only the portion of the spectrum which lies between A and H is visible to the eye, it has been found by Sekulić that the rays beyond the violet are distinctly seen if direct sunlight be allowed to fall upon the prism. Fraunhofer's lines as far as the N group make their appearance, and the M group comes out so clearly that its third broad line can be easily covered with the wire of the telescope. The N group is somewhat indistinct, only the bright bands being identified. The colour of this light is pale-blue or silver-gray. When examined with blue glass, this portion of the spectrum resembles a pale-blue vapour, at the background of which lie the dark lines ; by using a violet glass, it appears as a silver-gray band with the lines on a completely dark field. The lines of this very refrangible portion of the spectrum agree most completely with those of the photographic spectrum given in Müller's *Lehrbuch der Physik*. (*Archives des Sciences*, No. 175, 237.)

The Generation of Electricity by a Current of Water.—Zöllner has ascribed the production of the electric currents of the earth to the

incandescent molten masses in motion beneath the crust which generate currents in the direction of their own motion; and he has expressed the opinion that all current-movements of fluids, especially when in contact with solid bodies, are to some extent accompanied with currents of electricity that have the same direction as the fluids themselves. Zöllner inserted the ends of the copper wires of a very delicate galvanometer of Sauerwald just within the wall of a caoutchouc tube conveying a stream of water, and observed a deflection of several degrees of the scale, thereby indicating the existence of a current whose direction is that of the water. The greater the distance between the ends of the wires—which, by the way, need not be exposed to the force of the current, but may be replaced by metallic plates lying against the wall of the tube—the stronger the deflection of the needle. While recently repeating Zöllner's experiments, Beetz obtained (*Poggendorff's Annalen*, No. 7, 486) similar results, but found that the currents have a much simpler origin. The needle is deflected so long as the reservoir in which the water falls is not isolated. The metal tap, the stream of water, and the reservoir, in fact, form a voltaic element (brass, water, lead) whose current it is which deflects the needle. By filling the reservoir, and dipping the free end of the tube, also filled, into it, the current is observed though the water be shut off, nor does any change take place when the tap is opened. By simply inverting the position of the tube, the direction of the current is reversed; this is observed to be the case with or without a flow of water. If the reservoir be isolated, no current is formed; this is so whether the water be allowed to flow or not. When tap and reservoir are of zinc, no current is produced with or without a flow of water, and with or without isolation of the reservoir. According to Beetz's observations, then, no electricity is generated by a stream of water.

The Susceptibility of the Eye to Variations in Intensity of Colour.—The human eye, it is found, is over a considerably wide range susceptible to changes of brilliancy of white light, when the differences are equal fractional parts of the total luminous effect. Experiment has shown that on an average a change of one-hundredth of the total luminous effect, or even under favourable circumstances from $\frac{1}{100}$ th to $\frac{1}{1000}$ th, can be recognised. Dobrowolsky has experimented with the various colours of the spectrum (*Der Naturforscher*, No. 24, 193), and determined the limit of susceptibility of the eye to changes of brilliancy in each instance. He finds it to be for red, at A $\frac{1}{10}$, at B $\frac{1}{1975}$; and at C $\frac{1}{2518}$; for orange, between C and D, $\frac{1}{3518}$; for golden yellow, at D, $\frac{1}{4577}$; for green, between D and E, $\frac{1}{5577}$; for bluish-green, between E and F, $\frac{1}{6733}$; for cyanogen-blue, at F, $\frac{1}{1314}$; for indigo, near G, $\frac{1}{148}$; and for violet, between G and H, $\frac{1}{158}$, and at H, $\frac{1}{6743}$, at which point the intensity of the light fails. These numbers show that the susceptibility of the eye to these changes of brilliancy increases continuously as we pass from red to violet, being in the case of the latter colour from ten to twenty times what it is with the red. These observations agree with what has been noticed by Helmholtz, that by a proportional decrease of illumination of brilliantly coloured surfaces the red fades from sight more rapidly and sooner than the blue.

Conversion of Vis Viva into Heat.—It is well known that a fall of temperature is recorded when a current of compressed air is driven against the face of a thermo-pile. Volpicelli (*Poggendorff's Annalen*, No. 6, 305), on allowing air which had been cooled to the ordinary temperature to escape from a pressure of four atmospheres against a thermo-pile, noticed three effects. When the nozzle was near the pile, a rise of temperature was remarked; when it was removed to some distance, a fall of temperature was observed; and when it occupied an intermediate position, the needle remained motionless. The causes of these variations of temperature are of three kinds: one arises from the destruction of the vis viva of the air; a second is brought about by the condensation of the molecules of air in the pores of the metal of the pile; and a third is due to the expansion of the molecules during their passage. The first two causes produce a rise, the third a fall of temperature. The movement of the needle will show whether the first two causes of variation are greater, equal to, or less than the third. Volpicelli's observations accord with those already described by Tyndall in his lectures on Heat.

Thermo-electric Characters of Crystals.—H. Hankel has made an examination (*Der Naturforscher*, No. 22, 177) of the nature of the electricity developed in crystals, especially in topaz, by a rise or fall of temperature, and has arrived at the following conclusions: 1. The thermo-electricity of a crystal is not directly due to hemimorphism, but appears to be a property of all crystals where other physical characters favour its development and accumulation. 2. As in crystals that are not hemimorphous the terminations of one and the same axis are crystallographically similar, these crystals have similar electrical characters, or, in other words, exhibit the same polarity, provided their development is actually the same. 3. The distribution of electricity on crystals that are not hemimorphous depends not alone on their molecular structure, but also on exterior form, and may by any change occurring thereon undergo modification. 4. As hemimorphism is to

be regarded as an exceptional case in crystallography, the development of opposite electricities at the two ends of the axis, a direct result of hemimorphic structure, is likewise exceptional. An alteration of the outer form of hemimorphic crystals appears to cause no quantitative change in the distribution of electricity, which appears therefore to be materially conditioned by want of symmetry in the molecule.

Development of Heat by Friction of Liquids with Solid Bodies.—O. Maschke (*Pogg. Annalen*, No. 7, 431) has carefully investigated the rise of temperature which is observed when amorphous silicic acid is moistened with water and other liquids. Of his results a few require mention. Amorphous silicic acid which had been moistened with water, and so far dried that it had the appearance of porcelain, and contained 39·8 per cent. of water, showed a rise in temperature from 15° C. to 16°·5; silicic acid, H_2SiO_3 , rose from 15° to 21°·5. Silica which had been strongly heated and afterwards exposed to a very damp atmosphere rose from 19° to 22°. Silica which had been strongly heated and allowed to cool over sulphuric acid rose from 16° to 23°·8 when water was added; another portion of the substance moistened with benzol rose from 19°·7 to 24°·5; a further quantity treated with oil of almonds showed a rise from 20°·5 to 26°·5; and a fourth portion moistened with sulphuric acid of the specific gravity 1·841 rose from 19°·2 to 33°·5. About 20 grammes were taken in each case, and the bulb of the thermometer was placed in the centre of the powder. Glass and quartz reduced to a similarly fine state of division, on being moistened with water, showed no rise of temperature that could be detected by the ordinary means.

The Heat Spectra of Sunlight and the Limelight.—In an elaborate paper on this subject by S. Lamansky in *Pogg. Annalen*, No. 6, 200, the author, on comparing the position of the maxima of heat-effect in the two spectra obtained from flint-glass prisms, finds that the source of less heat-intensity attains a maximum heat-effect in rays of greater wave-length than is the case with the more powerful source of heat. He determined the absorptive powers of water, glass, mica, calcite, quartz, &c., and established the truth in each instance of what Melloni had previously observed with water: that the ultra-red rays on their passage through transparent substances suffer a loss which increases as the refrangibility of the rays themselves diminishes.

Explosions in Flour Mills.—An interesting article in *The Engineer* of 30th August, p. 145, having this heading, gives the results of an enquiry conducted by Professor Rankine and Dr. Macadam on behalf of the fire insurance offices into the circumstances which probably led to the explosion at the Tradeston Flour Mills, near Glasgow, in July last. The primary cause of the explosion was the accidental stoppage of the feed of a pair of stones, which led to their becoming heated and striking fire. This inflamed the finely divided dust diffused through the air of the exhaust conduits, the fire passing on to the exhaust box. The sudden ignition of the extremely inflammable dust diffused through the air would produce a very high temperature, and would necessarily be accompanied by a gust and sudden increase, in pressure and bulk, of the gaseous products of the combustion. The effect of this explosion was to burst the exhaust box, and allow a diffusion of dust and flame through the mill. A second explosion was the consequence, and the mill was reduced to ruins. The authors determined by direct experiment the interesting fact that this mixture of air and dust, when in the proportion best suited by theory to cause an explosion, produces, by being fired in a limited space, a pressure of eight atmospheres.

Geology.

Fossil Vertebrates from the Niobrara and Upper Missouri.—Prof. Leidy has founded a species of lion, *Felis augustus*, on several teeth and fragments of jaws discovered by Dr. Hayden at the Loup Fork of the Niobrara, Nebraska. The most characteristic specimen is an upper sectional molar about as large as that of the Bengal tiger. He also describes one of the caudal vertebrae of an animal related to *Plesiosaurus* and *Discosaurus*; and regarding the specimen as probably representing a genus different from those mentioned, he proposes for the species the name *Oligosimus grandaevis*. Another specimen obtained by Dr. Hayden in the "Black Foot country," at the head of the Missouri, has the appearance of having formed part of the dermal armour of a huge saurian, or possibly of an animal allied to the armadillo. Accompanying this specimen is a distal phalanx, which may belong to the same species, named *Tylotus ornatus*. (*Proc. Acad. Nat. Sc. Philad.* April.)

A New Arachnid from the Coal-measures of Lancashire.—In the *Geological Magazine* for September, p. 385, Mr. H. Woodward gives a description of a new species of *Arachnid* found in the clay-ironstone nodules of the Lancashire Coal-measures, which is remarkable for the close relationship it bears to a species of arachnid, *Architarbus rotundatus*, Scudder, from the Coal-measures of Grundy Co., Illinois. It is interesting to note how many of the old forms of life from the Carboniferous series of North America occur also with us, under similar conditions of fossilisation, in the clay-ironstone nodules of the Coal-

measures. Mr. Woodward proposes for this new species the name of *Architarbus sub-ovalis*.

The Divisions of the Chalk Formation.—At the last meeting of the British Association, Prof. E. Hébert proposed a new classification of this formation, which will embrace the deposits on both sides of the Channel. He names each bed after a characteristic fossil, and taking the Gault as the natural base of the Chalk, classes the overlying beds, in ascending order, as follow:—1. *Craie glauconieuse* (Upper Greensand and Grey Chalk); 2. *Craie à Inoceramus labiatus* (Chalk marl, chalk without flints, and part of the chalk with flints); 3. *Craie à Micraster cor-testudinarium* (part of the chalk with flints); 4. *Craie à Micraster cor-anguinum* (chalk with flints); 5. *Craie à Belemnite mucronata* (Norwich chalk). Between the first and second divisions come the Sandstones of the Maine, and between the second and third division lies the Hippurite limestone. For a series of papers on the classification of the cretaceous rocks according to all the various leading geologists, compiled with great care and labour by Mr. Davidson, see *Geol. Mag.* 1869, vol. vi. pp. 162, 199, 251, 300.

The Primordial Group of Canada.—The St. John's, or Primordial, bed, the most interesting of all the formations originally recognised as distinguished from the adjacent beds by Mr. Matthew, was first proved to be Primordial by Prof. C. F. Hartt. His discoveries with regard to the fossils, added to those previously obtained, enabled him to announce this conclusion with full confidence, the species of *Lingula*, *Paradoxides*, *Agnostus*, *Conocephalites*, *Obolellae*, &c. placing it beyond doubt. The formation mainly consists of shales, and is stated to be over 2000 feet in thickness. It occurs in southern New Brunswick, in the depression extending from the city of St. John by way of the Loch Lomond lakes to Hammond river, in the valley of the Kennebecasis and St. John's rivers, in St. John's and Northern King's counties, and perhaps also in the Nerepis valley, as well as at some other points. The strata of these districts are described in detail in the Report of Progress for 1870-71 of the Geological Survey of Canada.

Trachyte-porphry of Antrim.—At the last meeting of the British Association, Prof. E. Hull read a paper on the trachyte-porphries of the north of Ireland and the county of Antrim, which constitute a group of eminences about four miles to the north of the town of Antrim. The tops of these hills are formed of basalt capping the trachyte rocks, and it is supposed that basalt covers in the whole of the trachytic area; as the survey of the district is incomplete, the actual limits have not been determined in every direction. The rock consists generally of a nearly white or grey felspathic base, with individual crystals of sanidine, a tridinic felspar, grains of smoked quartz, and rarely a little mica. In some places the granules of silica are exceedingly abundant, giving the rock the appearance of rhyolite or perlyte as described by v. Cotta, and minute crystalline grains of magnetite are seen in a microscopic section. It is in this form that the iron found by analysis probably occurs. No passage or gradation between the basalts and the trachytes is met with, and as each has been erupted and spread out in sheets, they exhibit a laminated or bedded structure, which enables the observer to determine their relative positions without much difficulty. At several points the trachytic porphyry is observed to dip beneath the basaltic rocks of the neighbourhood; and observations on its direction tend to show that the trachyte is the older.

Researches on Fossil Crustacea.—Mr. Henry Woodward stated, in the sixth report of the committee for the prosecution of these researches presented to the last meeting of the British Association, that since last year he had completed his monograph on the Euryptera, that on the Xiphosura alone being required to make the history of the Merostomata complete, four 4to parts on this order, comprising 180 pages and 30 plates, having already been printed by the Palaeontographical Society. Mr. Woodward gives some interesting information on the branchiae of *Ceraiocaris*, and descriptions of three new forms of Phyllopods from Dumfries; two *Limuli* from the Coal-measures named *Prestwichia Birtwelli* and *Bellinurus Konigianus*; a new Cape trilobite (*Encrinurus crista-galli*) from the Cock's Comb Mountains, S. Africa; a new British arachnid (*Architarbus subovalis*) from the Coal-measures; some new shore-crabs from the Lower Eocene, Portsmouth; and a series of Miocene Crustacea from Malta. Mr. Woodward controverted the views of Haekel and Dohrn respecting the systematic position of the Merostomata among the Arthropoda, and contended that they should for the present be retained as an order of the class Crustacea; he illustrated their range, and that of the entire sub-kingdom of Arthropoda, by a diagram exhibiting the first appearance of Myriapods, Insects, Arachnides, and Crustacea, in geological time.

Botany.

Formation of Ozone by Plants.—C. Belucci has contributed to the *Gazetta chimica italiana* (i. 687) a note on this subject. The experiments of Scoutet, Bineau, Kosmann, and De Luca produced results which led those observers to infer that plants are sources of ozone; Cloéz, on the contrary, appeared to show conclusively that the ozone was due to other causes. He passed the gaseous products from

the plants through two tubes ranged side by side, and containing the iodized test paper; in one of these, which was exposed to the action of light, the test paper became coloured, while in the other, which was screened from the light, it remained unaltered, thus indicating that the action was due, not to ozone evolved from the plants, but to the effects of moisture, oxygen, and light on the test paper. The author has carefully repeated the experiments of Cloéz, and has devised new ones, in one of which he introduced into a large Wolfe's bottle of water saturated with carbonic acid, and containing a small quantity of potassium iodide and starch, sprigs and leaves of the following plants:—*Taxus baccata*, *Juniperus virginiana*, *Abies vulgaris*, *Thuja orientalis*, *Prunus Lauro-cerasus*, *Buxus sempervirens*, and *Chara foetida*. The apparatus was then placed in bright sunshine, but no change of colour was observed in the liquid, thereby proving that the green parts of plants do not evolve ozone under the influence of the solar rays.

Remarkable Elastic Force of Capsules.—At a recent meeting of the Academy of Natural Sciences of Philadelphia, Mr. Thomas Meehan stated that, while travelling through a wood, he had been struck in the face by some seeds of *Hamamelis virginica*, the common witch-hazel of the United States. He gathered a quantity of the capsules of this plant in order to ascertain the cause of the projecting power and to measure its force. Laying the capsules on the floor, he found the seeds were thrown generally from four to six feet, and in one instance as much as twelve feet. The cause of this immense projecting power he found to be due simply to the contraction of the horny albumen which surrounds the embryo. The seeds are oval, and are enclosed in a smooth bony envelope; and when the albumen has burst and expanded sufficiently to get just beyond the middle where the embryo narrows again, the contraction of the albumen causes the embryo to slip out with force, just as we should squeeze out a smooth tapering stone between the finger and thumb.

The Decomposition of Carbonic Acid by Plants in Coloured Light.—Prillieux and Baranetzky have maintained that the power of plants to break up this gas is dependent, not on the colour of the light to which they are exposed, but on the degree of its brilliancy. The incorrectness of this theory has been established by Sachs and Pfeiffer, and a recent paper by the latter observer read before the *Gesellschaft zur Beförderung der gesammten Naturwissenschaften in Marburg (Botan. Zeitung*, Nos. 23 and 25), gives the results of his experiments on this question. He exposed a water-plant in turn to the several parts of a very brilliant and extended spectrum, formed of concentrated solar light, and observed the number of bubbles of gas given off from the surface in a given time; from his results he drew up the following table:—

Red	25·4	Blue	22·1
Orange	62·0	Indigo	13·5
Yellow	100·0	Violet	7·1
Green	37·9		

The Silicium of Plants.—Recent researches have demonstrated the great analogy, in respect to chemical character, which exists between carbon and silicium. Though the presence of silicic acid in the ash of plants has hitherto been regarded as a proof of the existence of this substance as such in the living plant, it can no longer be denied that a portion of that silica may be due to the combustion of organic compounds containing silicium. In the present state of vegetable physiology, such a hypothesis cannot but meet with approval, for, on the one hand, no explanation has yet been offered of the function of silica in plants, while on the other it is known that certain plants can develop and thrive when deprived of silicium. If the chemist should show that silicium can replace carbon in plant-structure, much light will be thrown on this subject. A communication by A. Ladenburg (*Ber. Deut. Chem. Gesell. Berlin*, No. 12, 568) on this point requires notice, not that he has found a solution, but because he shows the direction in which it must be sought for. He first endeavoured to ascertain if a small, but constantly occurring, percentage of silicium in cellulose could not be ascribed to a silicium-cellulose or a similar body. After impure cellulose had been treated with nitric acid and potash successively, it left an ash containing 40 per cent. of silica. Pure cellulose, in the form of Swedish filter paper, which had been dissolved in copper-ammonia solution and precipitated with hydrochloric acid, left from 0·11 to 0·16 per cent. of ash, one-third of which was silica; the remaining two-thirds, however, being bases, leaves the matter doubtful. He next operated on *Equisetum arvense*, a plant containing 20 per cent. of ash, one-fourth of which is silica. After treatment with strong acid and potash, the amount of ash fell to 16 per cent., of which one-tenth is silica. In testing for a carburetted silica, analogous to silicopropionic acid, in the alkaline extract he obtained a body consisting chiefly of pure silicic acid, which on combustion gave 0·1 per cent. of carbonic acid.

New Publications.

BOULAY, L'abbé. Flore cryptogamique de l'Est. Paris : Savy.
BRÉBISSON, M. de. De la Structure des Valves des Diatomacées. Caen : Blanc-Hardel.

- BUCHNER, L. Sechs Vorlesungen über die Darwin'sche Theorie. Leipzig : Thomas.
- BUCHNER, T. Lehrbuch der anorganischen Chemie. Braunschweig : Vieweg und Sohn.
- DUSEIGNEUR-KLÉBER. Monographie du Cocon de Soie. Lyon : Pitrat.
- GÜMBEL, C. W. Die sogenannten Nulliporen und ihre Beteiligung an der Zusammensetzung der Kalksteine. 2. Theil : Die Nulliporen des Thierreichs (Dactyloporidae). München : Franz.
- HANNOTIN, E. Dix Ans d'Etudes philosophiques. Paris : Sandoz et Fischbacher.
- HARTING, J. E. A Handbook of British Birds. Van Voorst.
- LAMONT, J. v. Verzeichniss von 4003 telescopischen Sternen zwischen -9° und -15° Declination. München : Franz.
- LOTH, J. Lehrbuch der Chemie und Mineralogie. Leipzig : Wigand.
- MOIGNO, L'abbé. L'Art des Projections. Paris : Gauthier-Villars.
- MOINET, J. C., et GOUBET, J. Des Eaux minérales sulfureuses de Cauterets (Hautes-Pyrénées). Paris : Masson.
- PELLARIN, A. Hygiène des Pays chauds. Paris : Bailliére et Fils.
- SAINTE-ROBERT, P. de. Mémoires scientifiques réunis et mis en ordre. Tome I. Balistique. Turin : Bona.
- SHELLEY, G. E. A Handbook of the Birds of Egypt. Van Voorst.
- TSCHERMAK, G. Die Meteoriten von Shergotty und Gopalpur. Wien : Gerold's Sohn.
- VANDERKINDERE, L. Recherches sur l'Ethnologie de la Belgique. Bruxelles : Muquardt.
- ZINNO, C. S. Analisi qualitativa e quantitativa del Limone delle acque termominerali di Sciasfani. Napoli.

Philology.

The Development of Latin Word Formation. [Die Entwicklung der Lateinischen Formenbildung. Von Dr. H. Merguet.] Berlin : Borntraeger, 1870.

The Derivation of Verbal Endings from Auxiliary Verbs. [Die Ableitung der Verbalendungen aus Hilfsverben und die Entstehung der Lateinischen e-Decimation. Von demselben.] Berlin : 1871.

THE treatise of which the title stands first at the head of this article is an attempt to account for the origin and trace the development of the known phenomena of Latin grammatical formation. For his facts the author seems to have drawn chiefly upon Neue, Corssen, and Schuchardt, nor does he make any profession of independent research in this direction : the speculative portion of the book, so to speak, is therefore the most important, as being evidently that on which the writer has spent most of his pains and ingenuity. As several of his conclusions are seriously at variance with the views hitherto commonly received by Latin philologists, the book appears to have provoked a good deal of adverse criticism ; and the tract of which the title stands second is a reply to the objections raised by various scholars (notably Corssen and G. Curtius) against some of the author's theories, especially his theories of the -e or fifth declension, and of the part played (according to common opinion) by auxiliary verbs in forming Latin tenses.

Let us take the question of the -e declension first, as Dr. Merguet's treatment of this point is fairly typical of his whole method. "Its origin was," he says (p. 27), "as follows : From the feminine stems in -ia, belonging to the first declension, there branched off collateral forms in -ies. In some cases -ia remained the most usual form, in others -ies was preferred and -ia given up ; in the latter case the i was consequently lost, and finally altogether suppressed through the influence of the accent" (*fames, fides, plebes* standing for *famies, fidies, plebies*) ; "in other instances it was sometimes preserved (e.g. *rabies*), in others partly preserved and partly suppressed" (*faces* being an old form attested by Paullus, perhaps for *facies*). "Subsequently this declension was swelled by such polysyllabic consonantal stems as, after dropping their characteristic consonant, still ended in -ie (*quies, dies*), and the monosyllabic stems which by this means preserved the e of their solitary syllable."

The assumption here made that words in -ies formed the original stock of the fifth declension seems somewhat arbitrary, especially as the great majority of words with that termination consists of the names of abstractions (*segnities, &c.*) and obviously late formations. As for *fames, fides, and plebes*, it cannot be said to be anything like certain that they originally ended in -ies ; nor can the obscure sentence of Paullus about *faces*, "*faces antiqui dicebant ut fides*," be said to yield more than problematical evidence about a collateral form of *facies*. The monosyllables *res* and *spes* have as good a right as any words in -ies to be considered as originally belonging to the -e declension. As for *dies*, there is really nothing to show that its stem was not *die-* : *diur-nus*, to which those who take a different view appeal, has always seemed to us to be most simply derived from the ablative *diu*. The simplest way of dealing with this puzzling set of nouns seems to be to avoid the theory of mutual transitions from declension to declension, except in the few cases in which such a process can be certainly proved, and to assume the existence of two sets of stems, one in -e and the other in -es, the first of which formed the fifth and the last part of the third declension. If this hypothesis be correct, the -s in genuine fifth-declension words, such as *res*, *dies*, and (according to one declension) *spes*, would belong not to the stem, but to the nominative ending ; if it be incorrect, and *res* (for instance) be a complete stem, why do we not have *reribus* instead of *rebus* in the dative and ablative plural? *Spes*, it is true, shows a nominative plural *spères* as well as *spes*, and *sperare* is its derivative : on the other hand, it also shows forms belonging to the fifth declension, and its diminutive is not *sper-i-cula*, but *spe-cula*. No evidence can be produced to show which form of the stem is the oldest ; but analogy may be fairly said to be in favour of the form in *e*. Why the *e* stems retained the *s* of the nominative while the *a* stems dropped it, is difficult to say, nor do we think that Dr. Merguet has solved the problem : perhaps a bare *e* would have been too indefinite an ending, to say nothing of its liability to confusion with the short final *e* of neuters such as *retē, &c.*

With regard to the third-declension nouns in -es and -is, Bopp appears to be right in considering them to belong to a class corresponding to the Greek nouns in -ys, genitive -eos : a hypothesis which Dr. Merguet declines to admit. This class in Greek forms the masculine and feminine complements to neuters in -os or -es : compare *Μεγαλεύς* with *κλέος*, *εινεύς* with *γένος*, and the like. Thus *nubes* may perhaps be taken as a feminine corresponding to the neuter *vēfōs*. In Greek the oblique cases of both genders are formed alike, and this is the case in a few instances in Latin : compare *pulvis* (the original quantity), *pulveris* ; *vis*, *vires* with *genus*, *generis* : the change of the *s* in the stem to *r* in Latin corresponding here, as so often, to its omission in Greek (*γένε-(σ)ος, κτλ.*). Between the -es of the consonant and that of the vowel declension, however, there easily arose a confusion, shown already in genitives like *dies* and uniformly in the nominative plural. Thus, without any attempt at regular filiation, we may explain the variation of declension in *spes* and other words that exhibit it. The Latin language has in general a tendency to reduce similar forms to one type ; and the confusion, or tendency to unification, noticed here may be compared with that which took place between the verbs with *ē* and those with consonant or *ē* stems.

In his account of the genitive of the first declension, Dr. Merguet, if we rightly understand him, is not consistent. He says (p. 70) that *Prosepnais* (*C. I. L. i. 57*) is the only instance of the full ending of this case ; that the genitives in -as (*familias, &c.*) are abbreviations of it, but that in later

forms of its development the *i* appeared again. Does this mean that the genitive in *-ai*, *-ae*, is an abbreviation of the genitive in *-ais*, *-aes*? If so, it is difficult to reconcile this page with page 81, where we understand Dr. Merguet to contend that the genitive in *-ai*, *-ae*, is identical with the locative.

Coming to the pronouns, we find that Dr. Merguet considers *qui* to be a secondary form of *quis* (pp. 155, 156) : a hypothesis which seems to us in the highest degree improbable. On reading over carefully all that Dr. Merguet has to urge both in his main treatise and in his reply to his critics, we are still of opinion that the hypothesis of the older philologists was right, and that *qui* and *quis* are separate stems. There is, first, the exceeding unlikelihood of the *i* of *quis* being lengthened ; secondly, the patent fact that *qui* shows almost throughout an *o* stem, with or without the addition of *i* (compare also the conjunction *quom* or *cum* and the adverb *quo-t*), while *quis* and *quid* as obviously show an *i* stem. *Quem* and *quibus* seem, indeed, to point to an *i* stem, but *quem* may perhaps have come into use in order to avoid confusion with the conjunction *cum*, while side by side with *quibus* we also have the form *quis*. *Qui* and *quaes* resolve themselves naturally into *quo-i* and *qua-i*, forms which are supported by the corresponding forms in the Italian dialects. The declension of the two pronouns has, perhaps, owing to the singularity of the nominative singular, been nearly reduced to one, the oblique cases of *quis* being mostly formed from an *o* stem, as in the case of *is* ; but this seems rather to prove some later confusion than the original identity of the two stems.

But the most startling novelty of all is to be found in the section on the verbs, where the dreams of our childhood are rudely dispelled by the author's denial (p. 199, foll.) that the perfects in *-ui* and *-si* are formed directly or remotely from the auxiliary stems *fui* and *es*. This paradox, for such we must still consider it, is supported by a number of minor arguments ; but the author lays most stress upon what he considers the improbability of a Latin compound being formed by the junction of an inflected word with an uninflected stem (*ama-fui*, *die-si*). He will not accept as instances to the contrary such words as *assue-facio*, *cande-facio*, *are-facio*, the first part of which he considers may possibly represent old infinitives in *-e*, arguing from such phrases as *cande quoque faciunt*, *facit are*, &c., in which the two parts of the compound are separated, that a consciousness of the independence of the parts must have been present to the minds of the writers who used these expressions. Possibly ; but Ennius does not scruple to separate the two parts of *cerebrum* in his celebrated *saxo cere comminuit brum*, from which it would not be prudent to draw any etymological inference ; nor is it at all improbable that in using phrases like *cande quoque faciunt* the Romans were misled by the analogy of *bene* and *male facere*. But even if we were to concede that in *cande-facere*, &c. the first part of the word is an old infinitive, what is to be said of such compounds as *arci-tenens*, *silvi-cultrix*, or the Greek *χειριττόπαυ*? Here surely we have an uninflected stem compounded with an inflected word. The possibility of such compounds being shown, we have to consider whether in *ama-vi*, *mon-ui*, and perfects like them, *-ui* grew out of an original simple *-i*, or represented in its *-u* an independent stem. Without dwelling too much on the case of *pot-ui*, which may possibly be a copy and not the model of other perfects in *-ui*, it may unhesitatingly be said that all analogy both of Latin and of the Italian dialects, which exhibit perfect-endings in *-fi* and *-fed* corresponding to Latin *-ui* and *-uit*, is quite against the notion of the growth of a *u* out of the vowel which followed it. The growth of consonants out of

following vowels is an exceptional, not an ordinary, fact : forms such as *maturva*, *posuvit*, *Larisaeus*, and others quoted from Schuchardt by Dr. Merguet, are bastard growths, which probably admit of their own explanations either as mistakes or as false analogies : the general tendency of Latin being far more to wear away existing consonants than to create new ones before a vowel by a strengthening of the breathing. The ordinary theory that *-ui* is an abbreviation of *-fui*, if it does not absolutely run on all fours, offers at least a highly probable explanation of the facts, as the present writer endeavoured to show in his notice in these pages of Mr. Roby's *Latin Grammar* : as for the perfects in *-si*, Dr. Merguet himself grants that they correspond to the Greek aorists in *-oa*, nor do we think he shows any sufficient reason for rejecting the commonly received explanation of them.

It is to be regretted that a writer who shows at times so much insight and ingenuity as is displayed on many minor points in the discussions in this treatise should, on some of the main questions of Latin grammar, have adopted (as it seems to us) such perverse conclusions. The book, it should be observed, is left very incomplete by the absence of all treatment of the prepositions, adverbs, and conjunctions.

H. NETTLESHIP.

Six Lectures introductory to the Philosophical Writings of Cicero ; with some Explanatory Notes on the subject-matter of the *Academica* and *De Finibus*. By T. W. LEVIN, M.A. Cambridge : Deighton, Bell, and Co., 1871.

THIS book has a somewhat misleading title, since it is in the main a survey of ancient Scepticism, from its small beginnings in the days of Socrates to the time when it became an organized assault on all forms of theoretic belief and the accepted doctrine of a school. The chief points which come within the survey are the scepticism of Pyrrho, who seems to have formulated the universal doubt in the interests of practical ethics, and that of the New Academy, which was probably inspired by no higher motive than sectarian animosity to Stoicism. The author has not restricted himself to a merely historical review of his subject. Evidently no believer in M. Renan's axiom, "le jugement critique exclut le jugement dogmatique," he gives us along with the bane the antidote, in the shape of an exposition of the grounds of Scepticism with hints as to the way to meet the sceptical conclusion. The antidote, it seems, involves the acceptance of what we may call, in default of a better name, an insular variety of Kantism. Whether Carneades would be bound to admit this solution of his doubts, is perhaps for us, as for him, supremely unimportant. Nor is it necessary on our part to do more than enter a protest when we meet with the confident assertion that "the morality of Pyrrhonism, however low and unsatisfactory it may have been, was really only the inevitable result of the rejection of all *a priori* sources of knowledge" (p. 37) ; or when it is assumed that there was some natural correspondence between Scepticism and "the universal corruption of morals" which, if we may trust Mr. Levin, characterized a certain period of antiquity. Setting aside our dissent from his conception of history and of the logic and ethics of historical enquiry, we cannot say that his procedure in less disputable matters deserves unqualified approval. We think he might certainly have taken a wider view of the literature of his subject and made a wiser use of the materials he had. His authorities hardly appear to advantage in his pages. He gives us, for instance, an English version of a long passage in Brandis, who, in some remarks on the sceptical theory of evidence, naturally enough introduces the expression, "erin-

nernde Zeichen," a perfectly intelligible German equivalent for the Greek *ὑπομνησικὰ σημεῖα* more than once employed by Sextus Empiricus. Now instead of adopting the traditional English equivalent, "admonitive signs," or inventing some new one, Mr. Levin in two places suppresses this technicality altogether, and in a third represents it by a highly dubious paraphrase, "remembered impressions"! However, if the translations from the German are inexact, a stronger epithet is needed to describe those from the Latin. We fail to discover any sense or coherence in a passage like the following:—

"He has obscured it, however, either by his scholastic handling, or, as those who are well acquainted with this kind of Cicero's works will more probably think, he has derived it from that Greek writer whom he had elected as his guide when composing the book" (p. 189).

The original of all this, nevertheless, is a perfectly simple and straightforward sentence:—

"Eum [sc. ordinem] aut ipse adumbravit scholae formam sequens, aut, quod probabilius putabunt, qui hoc genus librorum Ciceronianorum intus norunt, ab eis scriptore Graeco sumpsit, quem sibi ducem elegerat in hoc libro componendo."

This is what Madvig says (in an excursus to his edition of the *De Finibus*), and one would have thought it impossible for any one to misunderstand it. Yet in the dozen pages which Mr. Levin has been so ill-advised as to translate from Madvig we might easily point out a dozen specimens of interpretation of precisely the same stamp as the above, or even worse. Strange as it may seem, the translator would have avoided one or two of his most serious errors, had he remembered that Madvig was writing for students of the *De Finibus*, and presupposed in his readers an acquaintance with the philosophical ideas and language of that book, as well as a competent knowledge of Latin. I. BYWATER.

Observationes Criticae in Cl. Galeni librum περὶ ψυχῆς παθῶν καὶ ἀμαρτητῶν. Scriptis Johannes Marquardt. Leipzig: Hirzel, 1870.

Iwani Muelleri Quaestiones Criticae de Galeni libris περὶ τῶν καθ' Ἰπποκράτην καὶ Πλάτωνα δογμάτων. Erlangen: Junge, 1871.

De Galeni Historia Philosophica. Hermannus Diels. Bonn: Georgi, 1871.

It would be difficult to say why modern philology has done so little for Galen—a writer who occupies no inconsiderable space among our extant remains of classical antiquity, and one who presents much of indisputable interest to the historian of science and philosophy. To this neglect alone we must attribute the shameful fact that Kühn's edition still keeps its place in libraries. If the scandal remains much longer, we shall certainly be without excuse, as we now know (what we before only suspected) that Kühn's book is the merest makeshift, and as offensive to the critical sense as it is to the eyes of the reader. The better light we now enjoy is in great measure due to the labours of three scholars, who, simultaneously but independently of one another, have been working in the same mine and arrived at similar results. First in order of publication comes Herr Marquardt with a dissertation on the treatise *περὶ Ψυχῆς παθῶν καὶ ἀμαρτητῶν*, pointing out the paramount importance for textual purposes of a Laurentian MS. (74, 3) of the twelfth century. In a similar spirit, and with an ampler supply of materials, Prof. Iwan Müller, of Erlangen, discusses the treatise *περὶ τῶν καθ' Ἰπποκράτην καὶ Πλάτωνα δογμάτων*. With the exception of the Aldine editor and an erudite countryman of our own, famous in Cambridge annals as having given his name to Caius College, the critics of the book have worked in the dark, and with no knowledge of the manuscripts: Kühn's edition depends on that of Chartier, Chartier's on the Basiliensis of 1538, and this last on the Aldine; so that

it may be imagined how seriously the vulgate has receded from the genuine and primitive form of the manuscript tradition. Thanks to Prof. Müller it is now ascertained that the oldest and best text is that preserved in a Laurentian MS. (lxxiv. 22), and one at Cambridge, both incomplete, but supplementing each other in such a way that they must be considered to have originally formed part of one and the same volume. Still more valuable is the essay of Dr. Diels, who shows (1) that the *Ιστορία φιλόσοφος*, so far from being Galen's, is the work of some sorry compiler who took his materials from Sextus Empiricus and the collection of *placita* in Plutarch; and (2) that the book as we now have it is in the most unsatisfactory condition that can be conceived. When first printed (in the Ed. Princ. of Aristotle), the text seems to have been directly or indirectly derived from the excellent Laurentian MS. (74, 3) to which Herr Marquardt has drawn attention. It assumed a new form, however, in the hands of Martianus Rota, a learned Venetian physician, author of a Latin translation which appeared at Basel in 1542. The additions and improvements suggested by him were adopted by Chartier, and thus passed into Kühn's edition, where we read them without note or comment, as though they had been an integral part of the Greek text from the first. Having pointed out the delusive character of the book as it stands, Dr. Diels proceeds to give us a considerable specimen of an entirely new recension founded directly on the Laurentianus, and with emendations by himself and other scholars. But, as Prof. Curtius Wachsmuth reminds us in an elaborate article in the *Gött. gel. Anz.* (1871, St. 18), the Laurentianus is not our sole authority in the matter, since there exists a medieval Latin version by Nicolaus of Reggio, dating from as early as 1341, and preserving a number of important and suggestive variations. Dr. Diels will doubtless tell us more about these in the larger work of which the present dissertation is the forerunner.

I. BYWATER.

TO THE EDITOR OF THE ACADEMY.

SIR,—In the *Academy* of April 1 (vol. iii. p. 140) a review of certain Assyrian discoveries of Dr. Oppert, which appeared in the *Journal asiatique*, xviii. 67 (1871), and was signed J. M., was ascribed to M. Joachim Ménant, the well-known Assyriologue. The statement has been repeated in my *Grammar* (p. 182). M. Ménant, however, has written to inform me that this is a mistake, as the article in question was not from his pen.

A. H. SAYCE.

Queen's College, Oxford, September 1, 1872.

Contents of the Journals.

The *Journal of the Cambrian Archaeological Association* for July opens with an excellent essay by Stephens on the Bardic alphabet called "Coelbren y Beirdd," which is shown to have been a mere modification of the Roman alphabet cut on wood by the Welsh, when the importation of paper into Wales had been successfully prevented by the English in the fifteenth century. The Bridell Ogham made out by Fergusson to be "Netta Sagro hoc Oudoco effeci" is made by Brash to read, "Neqasagrom Maqi Mucoi Neci," and explained in his usual wild way. Karl Meyer's article on the Welsh poems in the Codex Juvencus is quite a curiosity. The journal is however fast improving in the hands of its present editor.

New Publications.

ARISTOTELIS Politicorum libri octo cum vetusta translatione Guilelmi de Moerbeka. Recensuit Franciscus Susemihl. Accidunt variae lectiones Oeconomicorum. Leipzig: Teubner.

BURNOUF, Émile (directeur de l'École française d'Athènes). La Légende athénienne : étude de mythologie comparée. Paris: Maisonneuve.

DRAEGER, Dr. A., Director des Gymnasiums zu Friedland i. M. Historische Syntax der lateinischen Sprache. Zweiter Theil, erste Hälfte. Leipzig: Teubner.

THE ACADEMY.

"INTER SILVAS ACADEMI QUAREM VERUM."

Vol. III.—No. 57.

Readers are reminded that the mention of New Books, Articles, &c., in our lists is intended as a guarantee of their importance. The Editor of THE ACADEMY cannot undertake to return communications which are not asked for. The Editor cannot reply to questions from authors respecting the notice of their books. The next number will be published on Tuesday, October 15, and Advertisements should be sent in by October 11.

General Literature.

Ranolf and Amohia. By Alfred Domett. Smith, Elder, and Co. Poems by V., Author of *Paul Ferroll*. Longmans.

It is common enough to find the form and something of the spirit of poetry without the substance ; it is not so common, and to those who can distinguish between substance and shadow it is a welcome surprise, to find the raw material of genuine poetry in rich profusion, though uninformed by a true poetic thought. In *Ranolf and Amohia* we have charming scenery (in the widest sense) depicted from the fullest knowledge ; we have characters conceived with a good deal of insight and realised with a good deal of force ; we have even a romantic story managed with enough regard to probability to be interesting, and the result of all is an unsatisfactory poem. There is no unity in the style and manner of the book : the plan and management of the story and the metre in the happiest passages remind us continually of Scott ; here and there we come across a flavour of Shelley in his most abstract and least felicitous mood. And, as perhaps might be expected, we have paragraphs upon paragraphs not in the manner of Mr. Browning, but in the manner into which it would be easiest for Mr. Browning to degenerate, if we could conceive him divested of his tutelary subtlety and with all his mannerisms heightened—especially the fondness for describing one thing in terms of another, with which it is only related through the arbitrary associations of a too fertile fancy. And these elements lie together in juxtaposition without penetrating one another, without being fused into even a superficial unity by the individuality of the writer. The substance of the book is not quite so disjointed as its form, but such unity as it has is ethical, not artistic. One gets a tolerably complete impression, not of an episode in the hero's career, but of a stage in his spiritual development. He is introduced to us at the close of a hunt, like James Fitzjames, only he has had his dog killed instead of his horse, and he has killed a boar instead of having lost a stag ; also he moralises, which Fitzjames does not, for a page or so on the immortality of animals. After this he meets the heroine, and delivers her from his own followers, who meant to carry her off to their own chief as soon as their master (the hero) could dispense with their services. Then for two mortal cantos we have a succinct and tedious account of the hero's education : how he went to sea and came home and studied speculative philosophy, from Buddha to Hegel ; how he found commonsense reasons which satisfied him for disagreeing with all philosophers (for one thing, most came round to Buddhism), and falling back upon the simplest form of cultivated optimism.

VOL. III.—NO. 57.

The analysis and criticism of the different systems show that a good deal of reading and thought has run to waste upon them. There is no direction in which the unsustained pretensions and the unfulfilled promises of metaphysicians do more mischief than by attracting the misplaced curiosity of intelligent persons without a genuine speculative impulse. Having thrown away Hegel and exorcised materialism, Ranolf has to exhaust the "earnest" commonplaces as to the pros and cons of a profession. Before he has decided, his father dies and leaves him free to go to sea again. After half a canto of nautical experiences, which might have been polished up into pretty little independent poems, we have a shipwreck, not without power, but much too long. Then he and we are introduced to the natives, their manners and customs, and mythology ; this part of the poem proves that the *Lady of the Lake* would still have been readable if Scott had versified all the notes and embodied them in the text. The chief to whom Amohia was betrothed in her infancy is happily buried by a liquid landslip, but the sorcerer who made the match to keep up his own importance immediately arranges another. By this time Amohia is in love with Ranolf, so she flies to avoid being made "tāpu" again. To prevent her escape, all the canoes have been drawn up ; but she swims the lake to him. This is beautifully described, but there are too many beauties ; for instance, she rests herself by floating, and as it is night she sees and admires the stars, though, as she knew no astronomy, they could not be for her what Mr. Domett cannot help describing for four pages. When the lovers meet, they marry (which in New Zealand seems to be as informal a business as seduction is elsewhere), and set off to the tribe of the heroine's mother. On the way they receive intelligence that the lady's father, Tangi Moana, "The Wailing Sea," has quarrelled with the priest, and is prepared to sanction the match, so they wander home through the strange country round Lake Mahana. On their arrival they find the priest has stirred up a coalition against Tangi Moana, who is attacked in his island fort, and, though mortally wounded, gains the victory by the help of Ranolf's revolver. The battle is capitally described, after Mr. Domett has protested through six pages that fighting among savages cannot be so poetical as the civilised warfare of Wellington and Nelson and other British heroes. After the death of Tangi a new complication arises. Ranolf begins to pine for books, while he shrinks from the obvious embarrassments of taking a savage wife to England ; Amohia chooses to assume that he is pining for English girls, so she resolves to prove her love for him by surrendering herself voluntarily to the chief of a new coalition, which the sorcerer has egged on to secure her hand, and, in case of presumable resistance, to demolish her tribe and her husband. On her way to the sacrifice she meets the sorcerer, who makes an unsuccessful attempt to arrest her, and is swallowed up in a pool of pitch. She falls into a river, and is supposed to be drowned, and on her revival is detained by the chief of the village where she has been nursed, who wishes to have the merit of surrendering her to his lord-paramount, the chief of the coalition. Here she meets Ranolf, who is in despair at losing her, and is waiting for a passage to England. Her escape is easily arranged, and we take leave of them making love on the voyage, but the author will not let us go without some final moralising on the effects which his experience must have produced on the hero's character.

The best and most original parts of the book are the descriptions of New Zealand scenery (the manners and mythology, though cleverly managed, are done at second hand), and the purely idyllic passages. We give a specimen of the latter, not as the prettiest but as the easiest to isolate :—

" The kisses prest with youthful passion
 On Amohia's cheek were not alone
 The first those lips from one she loved had known—
 They were the first she ever felt at all!
 A novel mode, a strange too fervent fashion,
 Of salutation or caressing this!
 What aid, what safeguard to her side to call
 This subtle soft assailant to repel,
 This cunning and insidious foe—a kiss!
 Was it not thrice too thrilling? Might not well
 This meeting of the lips and breath appear
 Spirit to spirit, soul to soul, to bring
 Too dangerously close—too fondly near?
 Through joining lips seemed heart to heart to cling,
 And had not breath and spirit but one name—
 In hers as many a rougher tongue the same?"

It is a pity that an author who can write so well should have spoilt what might have been a really beautiful poem, by trying to pour all the thought and experience of a lifetime into it.

The title-page of the volume of poems by the author of *Paul Ferrall* reminds us that the *Quarterly Review* in 1840 committed itself to the belief that the nine poems, which were all Mrs. Archer Clive had yet published, contained stanzas "worthy of any one of our greatest poets in his happiest moments." Certainly we are more struck with the quality of the writer's talent than with its quantity, and yet this quality is too abstract, not to say too ghostly, to be really individual. The originality of the poems lies wholly in their intensity. There is nothing uncommon about the style, which never emancipates itself from the conventional range of the better class of album verses. There is nothing uncommon about the topics. We are all familiar with the certainty that the young will be old if they live long enough, with the hope that death may be the gate of a new life, and reunite parted friends. The thoughts are common even when the writer gets hold of such an out-of-the-way subject as the death of Chancellor, whom Mr. Hopley conscientiously went on beating as recommended by Locke, but unluckily the boy died under the treatment before it had subdued his half stupid, half vicious obstinacy. Any modern writer taking up such a subject would turn from the horror to the psychological curiosity, but "V." fastens upon one corner of the horror and keeps to it. She dilates upon the thought how shocked the poor lad's mother must have been to think she was comfortably in bed while it was happening. The poem is not one of V.'s best; but even here one half-stanza is unmistakably powerful and strange—

" Next morn an hireling did the first kind deed,
 And wiped the face no longer his but its."

And this is V.'s peculiar distinction to be so powerful as to be strange without ceasing to be obvious; she sees nothing which other people do not see, but she cares with all the strength of a proud, passionate nature about things that other people seldom care about. Anybody who read in the paper that a hundred and fifty invitations were sent for a Queen's ball for people who had died since the last could have guessed that some ghosts might have accepted the invitation to see if their daughters or sweethearts or brothers remembered them. Yet the *Queen's Ball* is a genuine and remarkable poem, because the writer expends so much deep and sustained feeling upon her hypothetical ghosts that we hardly miss the dry *recherché* subtleties which Miss Rossetti, for instance, would have invented for said ghosts to think. It is the intensity of realisation which makes *The Grave* solemn instead of rhetorical, not to say theatrical. The silence of the grave is a common thought, but this is not a common stanza—

" Around me stretched the slumbers of the dead,
 Whereof the silence ached upon mine ear;
 More and more noiseless did I make my tread,
 And yet its echoes chilled my heart with fear."

In the later poems there is at least one instance where the writer's singular personality has clothed itself in something like the inventive prettiness which we expect from all the readers of the Laureate. The following stanzas close a poem on *Old Age*—

" And once or twice in age there shines
 Brief gladness, as when winter weaves
 In frosty days o'er naked trees
 A sudden splendour of white leaves."

" The past revives, and thoughts return
 Which kindled once the youthful breast;
 They light us, though no more they burn,
 Then turn to grey and are at rest."

Both metaphors are beautiful, and beautiful as they are, their value is increased by the plain sobriety of what goes before.

It is curious, perhaps, that so abnormal a nature should be so eagerly submissive to traditional beliefs; the only approach to a cry of revolt is the feverish prayer for death at once sudden and triumphant, which forms the substance of the lines written in health. Perhaps it may explain this submission if we remember that mental intensity does not always imply mental activity, and that the author of *Paul Ferrall* has certainly written very little. Perhaps, too, this submission is one condition of the sustained quietness to which so much of the power and the horror of that singular tale is due.

G. A. SIMCOX.

LITERARY NOTES.

The German papers contain interesting accounts of the last illness, death, and funeral of Ludwig Feuerbach (on whose place in modern speculation we had some remarks not long since). The aged philosopher had been seriously impaired in his faculties since his first stroke in 1867, and had almost entirely lost his power of speech since the second, a few months ago. On the evening of September 2nd, he was enjoying the sunset from the verandah of his house at Nürnberg, with the members of his family and a Russian visitor, and was immediately afterwards taken with bronchitis, which ended fatally on the morning of the 13th. An immense concourse attended his funeral at the famous cemetery of St. John, and many speeches were pronounced. The occasion was taken for a demonstration on the part of the Socialist Democrats of the *Section Fürth* and *Section Nürnberg*, who marched to the funeral five hundred strong, bearing red flags; their leader, Herr Memminger, after the official oration had been delivered by Herr Scholl, coming forward to lay a wreath upon the grave in the name of Herren Marx, Jacoby, Bebel, Liebknecht, and the socialist and republican party in general.

The fifth number of *La Crónica de los Cervantistas* contains an article by the editor on "Cervantes in Toledo."—Don N. Diaz Benjumea, chief of the school of "spiritual" interpreters of *Don Quixote*, writes from London giving news of the progress of a new English translation, spoken of, as we have reason to know, too favourably as being "very far advanced."—The eminent Cervantophile, Pardo de Figueroa, who chooses to wear the thin mask of M. Droap, contributes another "Epistola Droapiana."—Señor Barrera defends his opinion of the genuineness of a tract usually attributed to Cervantes, though published without his name, containing a narrative of the festivities at Valladolid on the occasion of the birth of Philip IV. in 1605.—Don Manuel Cerdá continues his bibliography of Cervantes' works; and Father Sbarbi his astonishing polemic, proving the author of *Don Quixote* to have been a sound theologian.

Friedrich Bodenstedt, whose *Lieder des Mirza Schaffy* have already passed through forty-one editions, has just published his first novel, *Das Herrenhaus im Eschenwalde*, which is expected to have as much vogue as the shorter tales published last year under the title, *Aus deutschen Gauen*.

The 20th of October will be the two hundredth anniversary of the birth of the great compiler, Lodovico Antonio Muratori. The firm of Zanichelli in Bologna announce their intention to commemorate this date with a volume of documents and original pieces—*Scritti inediti di L. A. Muratori*—prepared with the collaboration of various scholars. The volume will be divided into two parts: the first will contain contemporary documents, edited by Cesare Foucard, in illustration of Muratori's career as archivist, librarian, and court councillor; the *Treatise of Moral Philosophy for the use of the Prince*, edited by Professor Galassini, a set of letters to Cardinal Quirini on the restriction of festival expenses, and some more miscellaneous letters;—the second, an *Autobiography*, addressed to Giovanni Antico de' Conti di Porcia, and a Catalogue of the bard's Archives.

There are some important English announcements for the ensuing season. Mr. Tennyson will finally complete his Arthurian cycle with an Idyll of *Gareth*, to be published in a volume together with *The Last Tournament*. Mr. Morris's poem of *Love is Enough*, which has been written some time, and was to have awaited the completion of a set of designs and illustrations by the author and Mr. E. Burne Jones, is now, we understand, to anticipate these embellishments in a plain edition already in the press. Lord Lytton announces a novel of society and reflection, under the title *Kenelm Chillingly*.

Art.

ART NOTES.

A fine portrait of Eugène Delacroix, painted by himself, has been hung in that gallery of the Louvre which is appropriated to works of the modern French school. The painting in question is a vigorous but rather slight piece of work, and appears to belong to that period of the artist's life in which he was in the fullest exercise of his powers, and comparatively simple in the methods he employed. He bequeathed the picture to his servant, Mlle Leguillon, who in her turn has bequeathed it to the museum of the Louvre.

M. Hector Horeau, one of the most distinguished amongst modern French architects, has just been carried off by death. M. Horeau was born at Versailles on October 4, 1801. In 1850, he competed for the Crystal Palace; but although his design was selected from amongst two hundred and forty-five others contributed by artists of all nations, and although it received the first medal, it was set aside for that of Sir Joseph Paxton, who was strongly supported by Prince Albert and the great engineer Stephenson.

On August 11, Friedrich Eggers, Dr. Phil. and Professor of Art-history at the Royal Academy of Berlin, died in that city. After the death of Kugler, Dr. Eggers conducted the *Deutsche Kunstblatt* up to the date of its extinction.

Count von Usedom has recently entered on his office of General-Director of the Royal Museum of Berlin. Dr. Ernst Curtius has been named Director of the Museum of Antiquities; and Dr. W. Bode as Directorial Assistant to the Galleries of Sculpture and Painting. Professor Springer has been called to the University of Leipzig, to fill the newly created chair of middle-age and modern art-history. Professor Springer was but recently nominated to Strassburg from Bonn.

Signor Demetrio Salazaró communicates, in a letter to the editor of the *Zeitschrift für bildende Kunst*, two interesting discoveries which have been lately made in the library of the Naples National Museum. The first is that of a *Trattato della Miniatura* of the fourth century, a treatise on the technic of miniature-painting at that time, on the preparation of the colours, on the employment of gold, &c., which has never been published nor even inscribed in any catalogue. The second find is a portrait of Desiderius, afterwards Pope Victor III., which occurs in a

Montecassino MS. Judging from the importance of the portrait and the style of the drawing, Signor Salazaró is inclined to consider it the work of Leone Amalfitano, the originator of another Codex of Montecassino, in which a similar portrait is found. The zealous inspector of antiquities expresses a hope that he may speedily be able to publish the treatise, and he announces that the portrait will be reproduced in his intended work on South Italian antiquities from the fourth to the thirteenth century.

The example set by the town-council of Nürnberg in commencing the wholesale destruction of the historical monuments of the city has not been without its result. Inspired by a like ardour, some unknown person or persons have been going about destroying whatever lay handy to their reach. First one of the stone oxen on the Fleischbrücke had its horns knocked off, next the figure of God the Father on the Moritzcapelle was mutilated, and now the ironwork which protected Rauch's statue of Dürer has been torn down and partially carried away. A bystander of the poorest class, seeing two civic dignitaries gazing curiously at the wreck, gave vent to his feelings with "Na, der macht's eben dem Magistrat nach, die reissen ja auch Alles ein!"

The Milan Exhibition, opened August 26 (see *Academy*, vol. iii. p. 327), is divided into two parts: one represents the modern, the other the earlier Italian school. Something over five hundred artists have contributed to the division of modern Italian painting and sculpture. The division for earlier work is devoted especially to the epoch of Leonardo da Vinci, in honour of the erection of his memorial. The gallery of paintings contains about two hundred and fifty works of the chief and most interesting masters of the old Lombard school, such as Mantegna, Luini, Gaudenzio Ferrari, Beltraffio, &c. Works of sculpture, goldsmith's work, woodcarving, all of the same age, abound; a special place is also provided for Agostino Busti's monument to Gaston de Foix.

A descriptive catalogue of the contents of the Grüne Gewölbe has now been given to the public by Dr. J. G. Th. Grässle, the director of the Grüne Gewölbe.

The *Zeitschrift für bildende Kunst* for September 6 contains—an article on Eduard von Gebhardt, one of the most distinguished pupils of the Düsseldorf school, by Bruno Meyer. The article is accompanied by an engraving of von Gebhardt's painting, "Die Erweckung von Jairi Töchterlein," painted in 1864.—Von Engelmann concludes his series of valuable notices of the last excavations at Pompeii and Herculaneum.—R. Zimmermann writes a short notice, but much to the point, on *Neue Schriften über Ästhetik*.—Dr. Thausing reviews Arnold's recent publication, *Das Werk von Georg Christian Wilder*.—The present number is distinguished by containing various proofs of wood-engravings from the catalogue of the *Ornamentstichsammlung* of the Austrian Museum of Art and Industry. One example after Jobst Amman is remarkably spirited and artistic. An etching after Tintoretto by Unger also deserves notice. As a piece of translation it is admirable.

The number for the 31st August of the *Jahrbücher für Kunsthissenschaft* commences with an essay by Professor F. Piper on the subject of *Maria als Thron Salomo's*. Professor Piper's original intention in writing the paper was simply to furnish a descriptive comment on a picture in the Christian Museum of the Berlin University to the catalogue of the collection. He enters upon a very elaborate and careful investigation of the symbol, of the various modifications in its treatment, and of the signification of the different and varying accessories. Having found in Christ the true Solomon, and addressed his mother, "Ave veri Salomonis mater," the next step was to find in the component parts of Solomon's throne foreshadowings of the virtues of the Virgin. Then Peter Damien, preaching on the birth of the Virgin, points out that she is herself that marvellous throne; the ivory betokens her maiden modesty, the gold the Godhead by which she is overshadowed; the two lions at the elbows are the Archangel Gabriel and St. John the Evangelist, and the twelve lions of the steps are the Twelve Apostles. Professor Piper gives a plan of the picture to which we owe his interesting paper.—

Dr. Ed. Dobbert contributes a few remarks on the treatment of the Last Supper in Byzantine art.—Wilhelm Schmidt sends notes on Holbein's portrait of himself, in the Uffizi at Florence, and on Nicolaus von Neufchâtel.—Dr. A. von Zahn writes on the *Ergebnisse der Holbein-Ausstellung zu Dresden*. In a note he gives a communication made to him by Professor Fechner, of Leipzig, after the essay was in print, which may possibly prove of importance by making fast one more link in the pedigree of the Darmstadt Madonna. Herr Ernst Benedict Kietz, an artist who resided long in France, writes to Professor Fechner from Zürich, 7th August 1872 : "M. [Pierre] Érard, the pianoforte manufacturer, now dead, shewed me in his château La Muette at Passy, which belonged to Marie Antoinette, the gallery which his uncle (Sebastian), the founder of the business, had had built expressly for his fine collection of pictures, in which still hung only a few but good old paintings. He expressed his sorrow that this collection, after his uncle's death without children, had to be sold on account of the heirs, and amongst others a Holbein Madonna, which was in no wise behind the famous Dresden one." Waagen mentions that Spontini obtained the Darmstadt picture for Prince Wilhelm through his brother-in-law Delahante, and it is a significant fact that Spontini's wife was a sister of Pierre Érard. But there are some dates to be set straight. Sebastian Érard, at whose death the picture should have changed hands, died in 1831, and according to Waagen in 1822 the Madonna had already arrived in Berlin. Possibly M. Pierre Érard may be in error as to the time at which his family parted with their Holbein.—Albert Jahn has some interesting notes on the sketchbooks of three Renaissance masters, in which he draws attention to the rich fund of materials lying unexplored in the library at Siena.—A paper by Georg Dehio, on the Theodoric statue at Aachen, concludes the number.

New Publications.

- BERSEZIO, Vittorio. *Roma la Capitale d'Italia*. Con 260 incisioni. Milano : E. Treves.
- COBBETT, Rev. R. S. *Memorials of Twickenham, Parochial and Topographical*. Smith, Elder, and Co.
- DINCKLAGE, E. v. *Geschichten aus dem Emslande*. Zweiter Band. Mit dem Portrait der Verfasserin. Leipzig : Schlicke.
- DULLO, Gustav. *Richard Wagner. Ein Wort der Aufklärung über die Nibelungen-Trilogie*. Königsberg : Braun und Weber.
- KOHUT, Adolph. *Alexander von Humboldt und das Judenthum. Ein Beitrag zur Culturgeschichte des 19. Jahrhunderts*. Leipzig : F. W. Pardubitz'sche Buchhandlung.
- LIPPERT, Dr. Paul. *Napoleon I. und sein Capus in Berlin*. Roman. MITHOFT, H. Wilh. H. *Kunstdenkmale und Alterthümer im Hannoverschen*. Hannover : Helwing'sche Hofbuchhandlung.
- TAUTPHOEUS, Baroness von. *Cyrilla*: a Novel. Bentley.

Theology.

The Authorship and Historical Character of the Fourth Gospel considered in reference to the Contents of the Gospel itself. A Critical Essay by William Sanday, M.A., Fellow of Trinity College, Oxford. Macmillan and Co.

IN this essay, which has been already commended to the notice of the readers of the *Academy* (vol. iii. pp. 167, f.), Mr. Sanday has examined in detail the contents of the Fourth Gospel with the object of determining from internal evidence the authorship and the historical character of the record. For carrying out this purpose he has submitted the whole Gospel to an elaborate analysis, and discussed with exhaustive care the various details which affect his enquiry as they present themselves. This critical investigation of the Gospel occupies the first seventeen chapters of the essay. The three remaining chapters deal with the *Current Arguments against the Genuineness of the Gospel* (xviii.), the *Summary Proof of the Genuineness of the Gospel* (xix.), and the *Hypothesis of Mediate Johannine Authorship* (xx.).

The general conclusion at which Mr. Sanday arrives is the only one, as we believe, to which a complete, impartial, open-hearted examination of the Gospel, as a whole, such as Mr. Sanday has set before the English reader, can lead, that "the Gospel is the work of the Apostle, the son of Zebedee;" that "it is the record of an eye-witness of the life of our Lord Jesus Christ;" and that "its historical character is such as under the circumstances might be expected;" "it needs" (Mr. Sanday adds) "no adventitious commendation to make it higher." But to obtain this conclusion from internal evidence, it is necessary that the enquiry should be free; and it is obvious that no critical examination of the Gospel can be free which starts with the assumption that the Resurrection (for example) is a myth and not a fact. In such a case the critic has to account for the appearance of phenomena in the narrative which are inconsistent with historical truth; and this assumption, which is generally made tacitly, produces a problem so different from that which is ostensibly put forward in the criticism of the life of Christ that nothing but error can arise from confusing the two together. To conduct an investigation into the worth of a record after predetermining either avowedly or by implication that an essential part of its contents must be legendary is to beg the question in debate. "The attitude proper to an enquiry . . . when the exact value of the historical evidence is the point at issue, will be" (as Mr. Sanday most justly observes, p. 48) "to assume provisionally that miracles are credible" (comp. p. 126, *note*; p. 271, *note*).

This necessary assumption, however, is the only one which Mr. Sanday makes; and even those who refuse to grant it will acknowledge the perfect truthfulness, candour, and sobriety, with which he takes account of the separate difficulties of each miraculous narrative. If the difficulties appear in his analysis to be less than they are commonly held to be, it is simply because they are not picked out and grouped together, but left as parts of an organic whole. Nothing is slurred over or extenuated, but the grounds of objection naturally assume their true proportion when they are regarded in connection with all the phenomena of the Gospel (see pp. 163, f.; 295, f.; 302, f.). The greatest merit of Mr. Sanday, and there can scarcely be a greater, is indeed this: that he brings before the student the many-sided character of the record with calm and patient exposition; that he points out its spiritual affinities with particular forms of thought and a definite crisis of national development; that he brings back the attention from isolated points to the general scope of the entire history; that he treats the author as a living man, and the events which he describes as actual events, reflecting in countless subtle ways the influences of an age and place rich beyond all others in the elements of an intense and manifold yet transitory religious life. Thus, for instance, he traces out with singular skill the relation of the current Messianic idea to the progress of the work of Christ as depicted by St. John. "It is almost superfluous," he remarks—and the observation may be extended to St. John's portraiture of Judaism throughout—"to point out how difficult, how impossible, it would have been for a writer wholly *ab extra* to throw himself into the midst of these hopes and feelings, and to reproduce them, not as if they were something new that he had learnt, but as part of an atmosphere that he had himself once breathed" (p. 124).

But the question of real difficulty in the Gospel of St. John is not that of authorship, nor yet of the truth of the facts which it relates, but of the essential authenticity of the discourses of the Lord contained in it. On this question Mr. Sanday decides that "the discourses must have undergone a sensible modification in the mind of the Apostle

before they came to be written down" (p. 73); that they "are deeply tinged with the individuality of the Evangelist" (p. 128); that "what is presented as a single discourse is probably made up of the fragments of several fused together and transmuted in the mind and memory of the Apostle" (p. 114); that "it had become impossible for the Apostle to separate the subjective and objective elements in his own mind" (p. 141); that "the discourses are all no doubt repeated under the impression that they represent what was actually spoken," but that "it is impossible for an active mind to retain the exact recollection of words over a space of perhaps fifty years" (p. 222, comp. p. 300); while still "they are not so far subjective as that they cannot have been written by an ear-witness and an apostle, or so as essentially to misrepresent the originals of which they are the reproduction" (p. 275).

In drawing these conclusions, we venture to think that Mr. Sanday has not given sufficient weight to several considerations which tend to modify them very greatly. It is at the outset unlikely, as a mental phenomenon, that the memory of the Evangelist should have preserved with intense vividness the minutest circumstances of action, and then at once have failed in the reproduction of words which were bound up with the fact. Moreover, if we once admit that the Gospel lives in an atmosphere of miracle, there can be no difficulty in believing that the natural powers of St. John were quickened to enable him to fulfil his work. It may also be added that it is a perfectly gratuitous assumption (though it seems to be universally current) that the discourses in St. John's Gospel were put together or committed to writing later than the discourses in the Synoptists. So much is clear from the whole structure of St. John's narrative that it represents oral teaching which he had long addressed to a circle of believers (this explains the comments, iii. 16-21; 31-36, on the discourses which precede them), just as the public oral teaching of the Apostles generally was unquestionably the ultimate basis of the Synoptic narratives. There is then nothing improbable in the supposition that the two cycles of teaching began to take shape from the first establishment of the Church (see v. 2, *τότε*); and if it were so, it is evident that one would have a wide and open currency, while the other would be kept within very narrow limits, and circulated only under something of reserve, and not shaped into a gospel till the very close of the apostolic age. But not to insist on this conjecture, which is at least as plausible as the popular opinion, there are several features in the Johannine discourses themselves which require to be brought into prominence before they can be rightly understood. They are compressed, often discontinuous, and at once (by a strange paradox) most specific and most universal.

The record of a living controversy is like the record of a battle. It is no more necessary to reproduce all the words spoken in the one than it is to describe all the incidents in the other, in order to give a true account of it. No one probably, supposes that St. John has preserved all the words which the Lord spoke on the occasions described in chapters v.-viii. It is enough if the selection of utterances which he has given conveys (as we believe it does) a perfect record of that aspect of the discourses which the Evangelist designed to portray. There is often need of the greatest patience and of the most watchful criticism to observe and follow the thread of thought which was (no doubt) fully developed in the spoken discourse. Such (to take one instance) is the origin of the difficulty in viii. 13, 14. In the same way, we find implied or explicit reference to unrecorded conversations which were present to the mind of the Evangelist, and probably were familiar to his first hearers. Thus, for example,

some earlier discussion on Isaiah liii. (and what could be more natural?) seems to have given occasion to the words of the Baptist, i. 29 (comp. pp. 40, ff.).

A sense of the discontinuity of the discourse is even more necessary to the right understanding of them in many cases than a sense of their compression. It happens frequently that the interlocutors are changed, that questions or objections are passed over silently, that even the scene is altered, while, on a superficial view, nothing of all this is apparent. In viii. 30; 32, ff., the change of tone depends upon a distinction in the character of the audience, which even Mr. Sanday overlooks (p. 155). Out of the "many who believed on Him" (*τοις πιστεύοντας αὐτῷ*) a special group are taken—"the Jews who believed Him" (*οἱ πιστεύοντες αὐτῷ Ιουδαῖοι*). In the body of the new disciples there were representatives of the degenerate hierarchy who admitted the claims of Jesus to be Messiah as true, and yet interpreted His office according to their own false views wilfully and persistently. St. John's use of the term "Jews," and the change in the construction of the verb, emphasize the transition, and when it is recognised, the general difficulties of the discourse which follows disappear. But the sixth chapter furnishes the most remarkable illustration of this phenomenon. Mr. Sanday, following the commentators, speaks of the teaching of the Lord contained in it as a long discourse, "addressed . . . to a mixed audience in the synagogue at Capernaum." A closer study of the record will show, as it seems, that there are three distinct audiences (or rather four), three distinct types of discourse, and certainly two distinct scenes. It is quite inconceivable that the Galilean crowd (verses 22, ff.) found the Lord in the synagogue (verse 59), and that the first animated dialogue (verses 26-35) took place there. Again, there is no mention of "the Jews" till verse 41, though they reappear in verse 52. Nothing, then, can be clearer than that "the Jews" are specifically distinct (as elsewhere in St. John) from "the multitude" (verse 24).* The "disciples" appear to have formed a third group, who are specially addressed (verses 37-40); for it will be observed that the objectors in verse 41 go back to verse 35, and take no notice of the more explicit claims advanced by Christ in the verses which follow. It must be sufficient now simply to indicate these constituent elements of the great discourses of this chapter, which really present specimens of (1) the Galilean teaching, (2) the controversial teaching with "the Jews," and (3) the fuller revelations to the disciples. Thus it is that this Galilean narrative, so far from telling against the belief that the peculiarities of the discourses of the Lord recorded by St. John depend on the circumstances of their delivery, really confirms the belief in a most unexpected manner.

This result would be further strengthened if it were possible now to show the individuality even of the open controversies of the Lord in St. John's Gospel, which places them in a peculiar category. This point, however, must be reserved for another occasion; but one subject still calls for notice, where there is less room for difference of opinion.

There can be no doubt that a critical determination of the evangelic texts must precede the critical interpretation of them; and nothing is more surprising than the perfunctory method in which scholars, who spare no pains in dissecting a text, prepare the subject for their experiments. A question of reading, if it happens to be noticed, is treated as if it were an isolated fact, and disposed of either by a mechanical calculation, in which authorities are supposed to have constant (numerical?) values, or by an autocratic judgment on "internal evidence." Mr. Sanday has not yet,

* It is characteristic of Prof. Maurice that he notices and rightly insists on this distinction (*The Gospel of St. John*, pp. 18a, f.).

as he modestly confesses, given time to textual criticism. This is, perhaps, a defect of secondary importance in the present work, but to attempt to deal with the Synoptists (as we trust he will do) without a clear perception of the affinities of the chief authorities and of their cumulative value in different groupings would be little short of courting failure. A single example furnished by the present essay will suffice to make this clear. The omission of the words "neither the Son" in Matthew xxiv. 36, as compared with Mark xiii. 32, is quoted in passing (p. 19) as one of "the principal instances of alterations" [in the common groundwork of the first three Gospels] "made from dogmatic grounds." Now, whatever may have been the cause of the omission of the words in the later copies, there can be no doubt that they were found in the original Greek text of St. Matthew. (Comp. also the false reading of Mark xi. 9, given on p. 194; and the remark on Luke xxiv. 12, p. 259.) But even in St. John, Mr. Sanday wavers, or, in our judgment, errs, as to readings which are of more or less importance. Thus, in iii. 25 he adopts silently the reading *Ioudaios* (p. 85), and consequently misses the vivid particularity of the singular *Ioudaios*, which is certainly right; in vi. 9 he makes a point of it, which is no less certainly spurious; in xiii. 2 an internal consideration is allowed to outweigh the decisive ancient authority for *γνωμένος*; and though the reading in xviii. 24 may, in the opinion of some, be made uncertain by other arguments, it is quite impossible for any one who has studied the combinations of authorities through a few chapters of St. John to say that "there appears to be a nearly even balance of authorities for *οὐ* and against it" (p. 244).

If we have thus frankly indicated some points on which we feel constrained to differ from Mr. Sanday, we trust that he will see in our remarks only a sign of the deep interest and pleasure with which we have read his book. The essay is not only most valuable in itself, but full of promise for the future. Mr. Sanday has proposed to himself a work for a lifetime (preface, p. viii); and we heartily desire that he may be enabled to execute the plan which he has sketched out with the calm, manysided, reverent labour, with the subtlety and sympathy of thought, with the grace and clearness of style of which he has given us the first-fruits. The criticism of the Bible has suffered grievously from haste under the guise of candour; but even when Mr. Sanday's conclusions differ from our own on grave points, we feel that what he has written will in the end be of good service to the Truth, which we have alike at heart. We are at present only on the outskirts of the knowledge of Holy Scripture, and yet we can perceive that the apostolic writings have a message to our own age, which only needs an interpreter that it may satisfy our doubts and aspirations.

B. F. WESTCOTT.

Le Christianisme et ses Origines. Première partie : L'Hellénisme.
Par Ernest Havet. Paris : Michel Lévy Frères, 1871.

M. HAVET is best known by his edition (1852) of Pascal's *Pensées*, rearranging and annotating the text recovered by M. Faugère, and by an article on M. Renan's *Vie de Jésus* in the *Revue des deux Mondes*, published separately under the title *Jésus dans l'Histoire* (1863). In the present volumes, which, he wishes his countrymen to observe, were all but ready before the war, he republishes a series of papers which appeared in the *Revue moderne* and the *Revue contemporaine* from 1867 to 1869 (vol. i. p. xliv). They exhibit the Pagan element in the sources from which M. Havet holds Christianity to be derived, and there is to be another part exhibiting the Jewish element : it will probably (i. p. xv)

bear the second title, *Ancien et Nouveau Testament*. The work will then be complete ; for in spite of the principal title, which seems to owe its precise form to the necessity of avoiding a title employed by M. Renan, there is to be no division dealing with Christianity irrespectively of its sources. This is chiefly to be regretted on account of the clearer and fuller view of Christianity in germ which would have been gained by a more first-hand study of it as developed : otherwise the plan is not so defective as might be supposed ; for the real subject of these two volumes is independent of all question as to what Christianity is, and would be most accurately stated without using the word at all, as the detailed answer to the question—How much of the theology, religion, and morality, of Western civilisation existed less developed in it before the preaching of Christ? The author would probably accept this account of his programme, but he does not always adhere to it ; a strict adherence to it would have excluded much that should rather be classed as Paganism in Christianity than as Christianity in Paganism, and would have cleared his pages of a number of coincidences between the language of the poets and philosophers and the language of the Bible or the "Catechism." We should have missed some epigrammatic points, but have been spared much irrelevant matter.

The subject is not new, and M. Havet does not profess to have much that is new to say about it. At one place (i. p. xxix) he is so modest as to represent his work as a classified collection of materials. But this does no justice to his generally picturesque style, to his well managed transitions and connections, to much thoughtful criticism, and to the warm, if not exactly wide, sympathies which keep the reader in the world of men and not in a world of books. His plan is best explained when he says (i. 4, compare p. 244) that the grand impression of an education of humanity, which a few powerful writers have conveyed in large outlines, he hopes to complete and deepen in his readers by fulness and richness of detail. The general effect approaches that of Mr. Lecky's books.

Unfortunately M. Havet is obliged to confess (i. p. xl) that he has hardly used any foreign works not translated. "J'ai souvent souffert," he adds, "de cette ignorance" : yet he hardly seems to see how serious the confession is ; especially as the exception in favour of translated books is very scantily represented among his authorities, and his "langues étrangères" turn out to include modern Latin, at least when not written by Frenchmen. This being so, the reader will not be surprised that the treatment of the pre-Socratic philosophy is slight almost to frivolity (i. 29, 43, 99) ; or that such a question as that of Socrates' belief in immortality is discussed with what can only be called *naïveté* (i. 146, 377) ; or that the Xenophontean *Apology* is without discussion cited about as freely as Plato's, and employed to correct the testimony of Xenophon's *Memoirs* (i. 147, 377) ; or that Plato is made without misgiving the author of a coherent system of philosophy (i. 203, and chapter vii. generally) ; or that the Neopythagoreans are barely touched upon (ii. 142, 234). Perhaps these latter will be handled episodically in the Jewish division. Meanwhile it must be said that there is not too much about the old Pythagoreans, nor much too much about the Eleusinian mysteries (though, as usual, these are too freely used as representing the mysteries generally), and very little about Oriental influences. Only, these things would occupy their proper places still more accurately if the influence of Delphi, which lies on the face of history, had been more conspicuous in the book.

Of the above deficiencies the slight treatment of the pre-Socratic philosophy is not in itself the most important ; but

it is the most significant, for it is the first serious symptom that the exposition is to be far too exclusively ethical. Now there is much in Christianity which cannot be brought under the widest definition of ethics. If Diogenes Laërtius or any ancient historian or critic of philosophy had written of St. Paul, he would have been obliged to deal with a large part of the apostle's doctrine under the head of physics. It is, therefore, needless to point out in detail how an examination of the sources of Christianity must suffer directly from such a narrowing of the field. But indirectly this one-sided treatment is connected with something which goes deeper, the excessive value M. Havet attaches to the negative or destructive operation of philosophic progress. He actually believes (i. 121) that if "such men as Diagoras" (whom he seems to take for a philosopher because he is proverbial as an atheist) could have had their own way, a sound edifice of morals, politics, and science might have been established in the fifth century before Christ; only the gods were too strong for us. He says himself (i. 138) that their strength was reinforced by a moral reaction against the license which had been encouraged by destructive criticism, and he knows how to illustrate very happily (i. 351) the natural horror of a theological vacuum. But he does not seem to recognise that unless the unrealities of superstition are replaced by real knowledge, the void is prematurely created. Nothing would have enforced this truth more effectually than a conception of the subject wide enough to embrace its more scientific branches.

At the same time the whole work is written in a polemical spirit, which is the more active cause of this over-valuing of merely destructive work. M. Havet writes the history of theology and religion from a point of view which is certainly antitheological, and which he would not mind hearing called antireligious. It is quite right that a man who occupies this point of view should write the history of theology and religion from it: but the historian ought to sympathize with the theological and religious spirit more than M. Havet does. He has formed his own notion of God, and, without the excuse of believing in its reality, measures by it any theology which comes in his way. If a notion of God does not include for instance a supernatural power of entering into and taking up, as it were, into himself the misery of mankind, it is not a good instrument for dealing impartially with those who suppose themselves to apprehend God under that aspect among others. The most conspicuous instance of M. Havet's unsympathetic treatment of theology (i. 166, on Rousseau's contrast of the death of Jesus with the death of Socrates) would take too long to examine in detail, but it is agreeable to observe that it is also a conspicuous instance of his ready appreciation of spiritual greatness as soon as he is allowed to approach it on the level of humanity. Yet his want of historical sympathy extends further. He has little sense of the spontaneous play of thought and curiosity. He cannot imagine that the paradoxes of Zeno, Protagoras, and Pyrrho, could have had any aim short of undermining Olympus. Generally he seems too fond of attributing an *arrière-pensée* to the earlier thinkers: not the esoteric doctrine which a venerable school of interpretation attributed to them, but something more like the well-bred reticences of modern unbelievers. He does not give Socrates credit, much less Plato, for believing in the existence of the gods. On the other hand, Diagoras having denied it, he resorts to an arbitrary anachronism to account for the audacity of the avowal. The passage (i. 136) is an instructive one, not to the student of the Hellenic sources of Christianity, but to the reader of M. Havet.

It is consistent with all this that the best thing in the book is the force with which it brings out the religiousness

of Greek and Roman philosophy. It is well shown how from the time of Socrates philosophy became constantly more practical, more conversant with morality, sounder in its morality, more the affair of all sorts and conditions of men, more religious, more like Christianity. Accordingly the second volume (for the order of exposition is chronological) is the more valuable of the two. Otherwise M. Havet is happiest where he deals with literature, as in Euripides, or where problems of personal character are concerned, as in Cicero and Seneca. This cannot be said to be the case with his account of Socrates: and Plato seems somewhat to elude him.

If not exactly a critical writer, M. Havet seems accurate in details. His references are full and exact, and his translations are generally good, if occasionally strained. He is less to be depended on beyond the strict limits of his subject; as when he says (ii. 45) we have scarcely any author and absolutely no historian belonging to a period during which Polybius, if he had not begun to write about it, lived, acted, and observed; and less again beyond the widest limits his subject can be supposed to have, as when he summarily corrects Megasthenes (ii. 37) for saying that Indian learning was preserved by oral tradition. Quite within the subject however, and not unimportant, is the misleading statement that the word "salut" or *salvation* comes from the Stoics and not from the Bible. The Stoical *salus*, we need not quit M. Havet to learn (ii. 266 and elsewhere, but see Cicero, *Tusc.* iv. 10, on Chrysippus), is *health*; whereas the *salus* of the Church is *deliverance*, *ωρτπια*, *y'sh't&*; insomuch that we read *salus ex inimicis, de manu*, &c. (Luke i. 71). In general M. Havet is disposed to criticize too severely the moral and psychological nomenclature of the Bible. Sometimes what he says comes merely to this, that Semitic languages do not form the close compounds of Aryan languages. To infer that the Jews never formed the conception of idolatry does strange justice to "Isaiah" at least. It may be feared that in the second part of the work, although (to judge by an interesting and powerful passage at the end of the preface) full justice will be done to the moral energy and enthusiasm of the Hebrews, their power of originating ideas will be limited too narrowly.

It is hard to know what to say of M. Havet's opinion on the relative importance of the Pagan and Jewish sources of Christianity. If we are to take him at his word in the preface (vi-viii, xiv-xvi), the Jewish and "Galilean" elements effected the "Christian revolution," but go for next to nothing in fully developed Christianity. Yet it is inconceivable that he should imagine he has accounted in the volumes before us for the vast edifice of Christian dogma, and improbable that he should not think it worth accounting for. But until we possess the other part of the work, all discussion of the question would be out of place: and it is to be feared that in consequence of the author's unfortunate limitation of his subject, such discussion will be almost equally out of place when the work is finished. C. J. MONRO.

RECENT WORKS ON WESLEY AND WHITFIELD.

THE works of Messrs. Tyerman, Gledstone, and Urlin, and Miss Wedgwood, on Wesley and Whitfield, cannot be allowed to pass without recognition, though the time for a critical estimate of the subject is perhaps still distant. Differing as they do in purpose and merit, they are an evidence of the change which has passed over the religious press in its way of treating a great spiritual movement. One of them, at least, viz. Miss Wedgwood's, is distinguished by its freedom not only from the prejudices of dogmatism, but from those of a submissive discipleship. The authoress describes her work as—not a biography—but an "attempt to delineate the influence of a particular man upon his age." In accordance with this plan, she

has analysed the various influences which in her opinion contributed to mould Wesley, e.g. his race ; the ascetic movement in Oxford ; his contact with German mystics among the immigrants whom he met with in his American mission. She attempts to explain the nature of his views, the gradual development of his missionary plans for England, the causes which aided and those which opposed their development. Her sketch is more slight with regard to the perfected system, and to its influence indirect as well as direct. The analysis of influences may perhaps be challenged not so much on the ground of inaccuracy as of incompleteness, while the estimate of Wesley's teaching, if even theologically defective, is at any rate truthful in its general effect. Mr. Tyerman's *Life and Times of Wesley* is a work of far greater pretensions, but fails to satisfy even a moderate literary standard. Offences against good taste are but too common, and we cannot repress the wish that the book may be rewritten and abridged in a future edition. It seems in fact to be mainly designed for the use of the Methodist community, and hence it gives expression to an admiration for Wesley which borders sometimes on the ludicrous. Yet with a rare and commendable frankness it sets forth the great leader just as he was, with his little failings as well as his great virtues. Purely personal matters like Wesley's falling in love and courtship are described with a fulness of detail which reminds one of an ordinary novel. Far be it from us to condemn this amusing particularity. There is nothing in the facts thus revealed disgraceful to Wesley. They relieve the Loyola sternness which is usually ascribed to him ; they show him to have been full of tenderness and feeling, capable of loving, and in fact very destitute of worldly wisdom and calculating prudence. On the whole, with all his defects of style, Mr. Tyerman has produced a book of permanent value. Southey's *Life*, checked and corrected by R. Watson's criticisms, must always hold its ground as the classical memoir, and the *Centenary of Methodism* (by the Rev. T. Jackson, a Wesleyan minister) as the best source for a general sketch of Wesley's system ; Mr. Tyerman's work will always be a museum to which students will resort for its copious and in great part hitherto unpublished materials for the life of Wesley.

Memoirs of Whitfield were few and out of print, and Mr. Gledstone (an Independent minister, we believe, at Sheffield) has furnished us with a full and sympathetic yet not extravagant picture of Wesley's great rival. There is hardly a sentence which could offend even a secular reader, except one at the end of the volume about "Grace, Grace, Grace;" but Mr. Gledstone is doubtless right in believing that Whitfield himself would have regarded those few last lines as the true explanation of his life. The limited interest felt in Whitfield's biography is due to the temporary character of his work, which was partly overshadowed by that of his coadjutors and rivals. It is the man, what he was, not what he did, which attracts us : and it is this view of him which M. Gledstone has succeeded in presenting to his readers.

Mr. Urlin's modest little book (*John Wesley's Place in Church History*) forms, by its pamphleteering spirit, a curious contrast to Miss Wedgwood's. The object of the writer is to exhibit Wesley as a high-churchman, and to produce the impression that Methodists would fulfil the designs of their founder by reuniting with the church. He certainly contributes some interesting and novel materials towards understanding one aspect of Wesley's mind. There is no doubt that Wesley passed through a state of high-church feeling, and had a slight acquaintance, through the works of the Nonjurors, with some early Christian liturgies. A slight trace of this is now and then perceptible in his later history, but his general views were the reverse, and his work mainly antagonistic. It was not his high-churchmanship which made Wesley the founder of Methodism.

Intelligence.

The *Ordnance Survey of Palestine* has appeared, accompanied by a letterpress volume, with reports and appendices by the members of the expedition and other scholars.

Dr. Abbeloos, of Malines, and Dr. Lamy, of Louvain, have brought out the first volume of the ecclesiastical chronicle of Bar-Hebraeus (A.D. 1226–1286; see title in full under "Philology"), edited from the MS. in the British Museum, with a translation and historical and geographical notes. It will no doubt supply much important material for the history of the Jacobite and Nestorian heresies.

M. Herder, of Freiburg, a Roman Catholic publisher, has issued a prospectus of a *Cyclopaedia of Christian Antiquities*, to be edited by Prof. F. X. Kraus. A second, corrected, edition of Hefele's *Conciliengeschichte* is in the press.

The *Zeitschrift für historische Theologie*, No. 2, contains a revised edition of the text of Commodian's *Apologeticum*, by Rösch ; and an article on the age of Irenaeus, and the origin of the old Catholic Church, by Lipsius (whose recent remarkable work on the legend of Peter will be reviewed in the *Academy*).

Dr. Pusey has just published a volume of University Sermons (from 1859 to 1872).

A new work by D. F. Strauss, *Der alte und der neue Glaube, ein Bekenntniss*, is announced for this month.

Contents of the Journals.

Zeitschrift für wissenschaftl. Theologie, vol. xv. No. 4.—Contributions to the history of the conciliatory form of Pauline doctrine (*Unions-Paulinismus*), by A. Hilgenfeld. [1. The genuineness of Rom. xv., xvi. 2. The Acts of the Apostles and Justin Martyr.]—On the Doxology in Rom. ix. 5, by E. Harmsen.—On Luther's translation of Sirach, by W. Grimm.—On a newly discovered MS. of the Vulgate, by H. Sevin. [A MS., probably of the fourteenth century, now in the possession of Herr du Fay, of Heidelberg. It is complete, except in the first leaf of the New Testament. Extracts and specimen readings are given.]—On the so-called Muratorian Fragment, by A. Hilgenfeld. [1. A connected text of the fragment. 2. A retranslation into Greek, with critical notes. A historical estimate of the fragment in conclusion. C. notice in *Centralblatt*, Aug. 10, by R. . . . h.]—Notices : Weiss' *Marcusevangelium*; Keim's and Hausrath's *Histories*, &c., by A. H.; Martensen's *Christliche Ethik*; and Rothe's *Stille Stunden*, by O. Pfleiderer ; &c.

Theologisch Tijdschrift, July.—History of the Logia-hypothesis, part ii ; by H. U. Meijboom. [Ch. iii. Application of Schleiermacher's hypothesis to Synoptic criticism in Germany. Ch. iv. The opponents of the hypothesis since 1848.]—Marten's *Faith and Works according to the Epistle of James*; rev. by Jungius. [A very able work of a conservative critic, called forth apparently by the equally able work of Blom on the opposite side.]—Bouvier on *Social Progress and the Pastors*; rev. by van Goens. [An opportune address to theological students at Geneva ; social questions to be taken up in a practical spirit from a Christian point of view.]—Notices : Waitz' *Anthropology*, vol. vi.; Lenormant's *Essai sur l'âge des Monuments*; Muir's *Sanskrit Texts*, vol. ii.; Ralston's *Songs of the Russian People*, &c.; by C. P. Title. [Able discriminating notices, which we have not space to analyse.]—Theological periodicals, by A. D. Loman.—Ranke's edition of the Würzburg palimpsests ; new part of Field's *Hexabla*; Diestel's edition of Knobel's *Isaiah*; Keil's *Jeremiah*; Martineau's lecture on *The Place of Mind in Nature*, &c., by A. Kuennen.

New Publications.

CROWFOOT, J. R. *Observations on the Collation in Greek of Cureton's Syriac Fragments of the Gospels with Schaab's Edition of the Peshito and the Greek Text of Scholz*. Williams and Norgate.

EWALD, H. *Die Bücher des Neuen Bundes übersetzt und erklärt*. I. Theil. 2. Hälfte. Göttingen : Dieterich.

JERVIS, H. *History of the Church of France from the Concordat of Bologna, A.D. 1516, to the Revolution*. 2 vols. Murray.

PHILLIPS, G., President of Queen's Coll., Cambridge. *A Commentary on the Psalms*. 2 vols. Deighton, Bell, and Co.

TYLER, T. *Some New Evidence as to the Date of Ecclesiastes*. Williams and Norgate.

WIRTZMEN, C. *Die Idee des Reiches Gottes*. Dritter Beitrag zur biblischen Theologie. Göttingen : Dieterich.

WÜNSCHE, A. *Die Weissagungen des Propheten Joel übersetzt und erklärt*. Leipzig : Fues.

Science.

Introduction to the Study of Palaeontological Botany.
By J. H. Balfour. Edinburgh : Adam and Charles Black.

PALAEONTOLOGY is far from occupying a satisfactory place in modern scientific work. The services it renders to stratigraphical geology in supplying indications by which the relative age of rock masses can be ascertained encourages palaeontologists to assume for it the rank of a distinct science, to which from a biological point of view it has not the slightest claim. Palaeontology, indeed, stands in much

the same relation to biology that the study of inscriptions and manuscripts does to that of literature—using the word in a wide sense. In either case the student finds the more ancient materials for his work far less complete collectively, and far less perfect individually, than the more recent. In either case, also, without disregarding a certain technical dexterity in interpretation which comes with the familiarity of experience, the full significance of what is ancient will be more likely to be apprehended, and the information drawn from it to be placed in its proper relations, in proportion as a wide and critical knowledge of what is modern is brought to bear upon it. But the study of the records of the past, whether belonging to literature or to the life-history of the Earth, can never, however intelligently conducted, be an adequate end in itself. It is simply to put in order part of the material from which general conclusions will have finally to be drawn.

Unfortunately, however, in many cases the palaeontologist, especially in dealing with fossil plant-remains, has been very little influenced by considerations of this kind. He has been often content to describe name and figure as a distinct organism any fragment which could not be matched with some other fragment already treated in this way. It is no matter, therefore, for surprise to find that in one case portions of what there is reason to believe to have been one and the same plant have been referred to as many as nine distinct genera. The fragments are different simply because they belonged to different organs, or represented the same organ in different states of preservation. A botanist bringing his knowledge of recent plants to bear upon them makes allowance for this, and by a reasonable synthesis unites the *disjecta membra* into a single and complete organism.

Two hundred years ago it was still held in England that fossil forms were to be explained by a "plastic virtue latent in the Earth." No reasonable person holds such a belief now, or feels any hesitation about admitting that fossil organic remains really belonged to organisms that once lived on the Earth's surface. But in our National Museum our practice is so far behind our theory that instead of the remains of different groups of extinct organisms being associated with those of their recent representatives, in comparison with which they would be most profitably studied, we find them forming a single heterogeneous assemblage, arranged in the same gallery as that in which the collection of minerals is displayed. This is a system which cannot be maintained. Extensive palaeontological collections are not indispensable to the study of stratigraphical geology. The geologist, in fact, is compelled to accept from different naturalists the determination of the organic contents of the rocks he examines, just as he has recourse to the chemist and the mineralogist for his knowledge of the composition of the rocks themselves. On the other hand, the ultimate problem which presses itself more and more on the attention of the student in every branch of biology is to trace out the order which evolution has followed along different lines of organic descent. In studying recent organisms, we hold in our hands the ends of threads which stretch back into the past, if we could only follow them. Too often the threads are broken, lost, or but faintly seen. But the very difficulties which beset the investigation only prove the necessity of bringing to bear upon such traces as exist every means of elucidation at our disposal.

Considerations of this kind naturally prepare us to receive with satisfaction from the hands of an experienced botanist the first English attempt to sum up in an independent treatise the results which fossil botany has achieved. The *Fossil Flora* of Lindley and Hutton, although an exceedingly valuable work, was merely a miscellany of figures and

descriptions, without any attempt at method. But Professor Balfour has aimed rather at giving conclusions than the materials for them, and in this respect his book will suggest a comparison with the *Tableau des Génres de Végétaux fossiles*, published now nearly a quarter of a century ago by Brongniart. Any one who has not kept pace with the very scattered literature of the subject will find his attention drawn in Professor Balfour's pages to almost everything of importance that has been recently published in it. Although in many foreign countries vegetable fossil remains have been the subject of more numerous and more splendid publications, yet it may be fairly claimed that it is with ourselves that the greatest progress has been made in the critical determination of their structure.

Professor Balfour has preferred to describe the vegetation of successive geological periods, so far as it is known, to tracing the history in time of different vegetable groups. No doubt this is a convenient as it is the conventional plan, but it is somewhat deficient in suggestiveness, and certainly opens the way to some misapprehensions. For example, Professor Balfour adopts Brongniart's identification of the Palaeozoic, Mesozoic, and Cainozoic periods in time (including in the last the Cretaceous epoch) with the reigns of Acrogens, Gymnosperms, and Angiosperms respectively. Twenty-three years ago this was not an unreasonable as it was certainly an elegant generalisation. That, in fact, was its defect; neat and sharply defined limits in natural phenomena generally fade away in the light of more ample knowledge. Nine years after the publication of Brongniart's *Tableau*, Dr. Paterson discovered in a bituminous shale near Edinburgh *Pothocites Grantoni*, which has been generally accepted ever since as a monocotyledonous flowering plant. It can therefore no longer be asserted that in the Palaeozoic period the higher Phanerogams were absent. Nor can it be even said that amongst Phanerogams *Pothocites* belongs to a very primitive type. The condensation of its inflorescence and the reduced structure of its flowers imply, on any hypothesis of evolution, the previous existence of flowering plants which had undergone less differentiation. Indeed, for anything that can be positively said to the contrary, there may have been during the Carboniferous epoch a phanerogamic covering to the Earth hardly less varied or less complicated than there is now. Our knowledge of the vegetation of that time is confined to the forests of arborescent Cryptogams fringing the deltas of great rivers. Stems of coniferous trees were occasionally floated down from the higher ground; of the plants that grew with them we know nothing.

Still less can it be said of the Mesozoic period that its fossil remains convey any adequate notion of the contemporary *facies* of the vegetation. The cones and driftwood that occur in rocks of marine formation of this age would have been little injured by immersion in water in which the flowers and foliage of less rigid plants would speedily have decomposed beyond recognition. Such guesses as we can make about the actual vegetation of Mesozoic land surfaces stand in the same relation to the reality as those which a traveller would make in approaching a new country from the ocean, and in collecting the vegetable waifs and strays borne out to sea by currents, do to the estimate which he afterwards forms when he botanises at leisure on the land itself. It is, however, only fair to admit that if arborescent Dicotyledons existed to any large extent anterior to the chalk, it is hardly explicable that we have as yet no evidence from driftwood that this was the fact, except Mr. Sorby's notice of some non-gymnospermous wood from the Lias near Bristol,* which appears to have been over-

looked. In the "dirt-bed" of the Upper Oolite we have a true land surface, but the ligneous plants of this were undoubtedly gymnospermous. It is far from improbable however that, at any rate, herbaceous Dicotyledons had made their appearance in the Mesozoic period. Monocotyledons, as already pointed out, are certainly known to date from a time still earlier, and in the herbaceous condition Dicotyledons are less different from Monocotyledons than when they become woody. Several facts seem to prove that existing trees are more modern than herbaceous plants belonging to the same groups. They have, for example, more confined ranges, and often represent on oceanic islands, apparently because the exaltation of their stature has had less to struggle against, orders which elsewhere comprise only herbaceous plants. Probably in every group the arborescent habit has been a subsequent development.

It seems, therefore, rather hazardous to speak, as Professor Balfour repeatedly does throughout his book, as if we had any adequate knowledge of the floras of different stages in geologic time, and especially hazardous to institute comparisons between them. The proper function of palaeontological study in relation to biology seems to be, not to attempt to reconstruct pictures of the life of the past, but to compare the structure of extinct organisms with the more recent in order to determine the laws, if possible, which connect the two.

And in this respect, it must be confessed, Professor Balfour's book is somewhat disappointing. That it is really an expansion of a chapter in one of his larger works is an explanation why it should be so; but the somewhat sketchy treatment, which was suitable enough under those circumstances, is unsatisfying in the pages of a separate treatise. There are, in fact, too many lists of mere names—suggestions only of knowledge—and too few detailed descriptions of what the names stand for. A few instances will illustrate this. *Prototaxites*, originally described by Principal Dawson as the oldest existing coniferous wood, is properly referred by Professor Balfour to the *Algae*; nothing is however said of its very curious structure which would explain the bare possibility of such opposite views about it. The stems of ferns from the Coal-measures, Professor Balfour states, "are referred to the genus *Caulopteris*." But this reference is only a cumbrous way of saying that they are certainly fern-stems, and that nothing more is known about them. The very remarkable fossils known as *Cardiocarpum* were possibly, as Mr. Carruthers believes, Gymnosperms. The suggestion, however, at first sight seems more bold than felicitous, and it would certainly seem to render desirable some setting forth of reasons in its support in Professor Balfour's pages, as well as some expression of his own opinion about it. A very remarkable fossil type—*Bennettites*—is merely said (p. 84) to correspond amongst *Cycadaceae* to *Taxus*, a view which may be disputed if Dr. Hooker* is right in considering the female flower of *Taxus* as really forming a cone. In any case, it is curious to speculate what amount of information ordinary readers of the book are likely to get from the accompanying figure (pl. ii. f. 3), with no further explanation to aid them than the above remark. Those who know what to look for will find in it sufficient material for reflection; but Professor Balfour's pages do not guide them.

To return to an analogy used already, there can be no advantage in perpetuating a bad reading, whether of a manuscript or of a fossil. It was hardly, therefore, worth while, in the preliminary account of the flora of the Mesozoic period, to insert the obsolete synonyms of various coniferous fossils once believed to be cycadean (p. 78). Moreover, as some of them, *Pinites macrocephalus*, for example, are Ter-

tiary, their introduction in this connection may be even misleading.

Our knowledge of the botany of the Cainozoic period is sufficiently ample to suggest some very interesting problems. One of the most important is the relation of the Miocene European to the existing North American flora. Professor Balfour has possibly regarded the discussion of this as belonging rather to geographical than to fossil botany. Unger, as is well known, struck with the resemblance between the plants which formerly grew in Central Europe and those now found in the Southern United States, especially on their eastern side, proposed the theory of an Atlantis. Professor Oliver* has, however, shown the much greater probability of the migration having taken place by land connections between North-eastern Asia and North-western America. The Tertiary element in the vegetation of the Old World, which has died out in Europe, seems to increase in strength proceeding eastward towards Japan, where it is at its maximum. A gradual convergence of evidence from other branches of natural history is also tending to establish beyond doubt a former Asiatic connection of the Old and New Worlds.

But with regard to these criticisms, it is only fair to point out that they have been made from an entirely different standpoint to that of Professor Balfour. "There can be no doubt," he says, "that there have been successive deposits of stratified rocks, and successive creations of living beings." But the two things by no means necessarily go together. Changes in the distribution of land and sea produced discontinuities in the sequence of sedimentary rocks. Yet it is impossible to show from geological evidence that the lines of descent amongst organisms have not been continuous. No doubt we have positive proof of their often having come to an abrupt conclusion; but, at the best, nothing stronger than negative evidence can ever be urged in favour of their having had an equally abrupt beginning.

W. T. THISELTON DYER.

FATHER SECCHI ON SOLAR DISCOVERIES.

TO THE EDITOR OF THE ACADEMY.

SIR,—In Mr. Lockyer's review of my book, *Le Soleil* (*Academy*, No. 53, vol. iii. pp. 288–290), I find some remarks to which, as they tend to the discredit of my scientific loyalty, I beg you will allow me to take exception.

The book which Mr. Lockyer reviews was written in 1869 and published in 1870. Therefore it is not surprising if he should find my work incomplete as regards contributions made to the science since the date when it was done. Such are those publications of the Kew astronomers which were laid before the Royal Society in March 1870, and others which have appeared in 1871, and even (see the columns of *Nature*) in 1872. Would it not have been at the present date more to the purpose if Mr. Lockyer had chosen for review the German edition of my book (translated by M. Schellen, of Cologne), in which I have made additions increasing its matter to one-half more than that of the French edition? He would not in that case have been able to reproach me with doing less than justice to British astronomers—himself included—and their discoveries. Indeed, I think there is hardly a section in the book which does not mention and appreciate the labours of British astronomers. I cannot be sure of having, in a work of such compass, omitted no single name of those which I ought to have mentioned; but this I know, that I have received thanks and acknowledgments from many quarters in England for the justice which I have done to English science. And I have considered myself honoured by the spontaneous offer of Mr. R. A. Proctor to translate my work for the English reader. This English edition will contain a still further quantity of new matter.

Besides the case of the Kew astronomers, Mr. Lockyer complains that I have not alluded to the thermo-electric researches of M. Henry on the sun; and that I have erroneously put forward as my own.

* *Trans. Linn. Soc.* vol. xxii. p. 138.

the division of stellar spectra into three types. Now, M. Henry did not really precede me in this matter. If he advanced any hypothesis before me, as Arago certainly did, still it was I who first brought the subject into the domain of established fact. That I did so, as Mr. Lockyer must surely be aware, was fully agreed in Arago's time (1851).

Neither is my reviewer correct in what he says of Mr. Rutherford's distribution of stellar spectra. Mr. Rutherford's three groups differ radically from mine. He takes his divisions from the general colour of the star, so that in his first group he ranges *Capella*, β *Geminorum*, and γ *Leonis*, which are of my second type; as well as α *Orionis*, β *Pegasi*, which are of my third. The difference is obvious. My divisions are not based on the colours, but on the principal bands of the spectra. Now, I think that Mr. Rutherford entertains no clear distinction of these, and has not proved their constancy in the different stars. Mr. Rutherford's second order agrees with my first; but this is such a natural distinction that I had made it also myself in 1863, before I was acquainted with the labours of Mr. Rutherford. Mr. Rutherford's third group is made up of β *Orionis* (*Rigel*), α *Virginis*, and others, as being stars supposed to have spectra without lines. Now this is quite mistaken. Accordingly, no valid claim to priority concerning these can be made in favour of Mr. Rutherford; and of the fourth type, which is not less essential, he has no word. Besides, to establish positively the reality of the types in question, it was necessary to examine many more stars than were examined by Mr. Rutherford. And the merit of this examination is exclusively mine.

Again, to test the maturity and soundness of Mr. Lockyer's criticisms, I should like to ask him:—(1) Is there necessarily the contradiction which he says between my propositions that "solar spots are due to eruptions," and that "in the solar spots there are tornadoes and rotatory motions"? Do these two propositions really exclude one another: and if so, was that to be certainly known at the date 1869?

Again, as to Mr. Lockyer's allegation of the *perfect ignorance* which I display with reference to Mr. Balfour Stewart's objections to the theory of the gaseous sun, I should like to ask him:—(2) Is it certain that a gas must always be perfectly transparent, whatever the depth of its stratum? (3) Is it certain that a gas must retain this transparency constant and complete, even at the highest possible temperature which it may reach in the body of the sun? (4) Is it certain that those gases and vapours which by their absorption produce the Fraunhofer lines are perfectly transparent?

To my ignorance it seems that, if all these questions could be positively answered in the affirmative, several received points of solar theory would be in great danger.

Finally, I would by no means be understood as supporting for the exact truth everything advanced in my first edition, any more than my reviewer would himself maintain all his own past opinions on the solar constitution. In this matter *ALIQUID audendi semper fuit aqua potestas*; but also, *hanc veniam petimusque damusque vicissim*.

P. A. SECCHI.

Notes of Scientific Work.

Physiology.

Lymphatics of Mucous Membranes.—Axel Key and G. Retzius have recently demonstrated the presence of a lymphatic system in serous membranes, and Hjalmar Heiberg has just published a paper showing that a similar system exists in mucous membranes (*Centralblatt*, No. 32). His investigations have been chiefly made on the mucous membrane of the nose of man. The portion employed in the examination was usually taken from the inferior turbinated bone, and was then hardened in alcohol, and stained with gold or carmine. He describes the mucous membrane as being more or less fused with the periosteum, and its *Tunica propria* to be very vascular, so that at the posterior portion of the inferior turbinated bone it forms quite a cavernous tissue. The connective tissue of the mucosa is fibrillar in its deeper part, but becomes more homogeneous superficially, and ultimately merges into the basement or Bowman's membrane. The most superficial layer is often infiltrated with lymph corpuscles. The epithelium is laminated, and the superficial layer is ciliated. The basement membrane, above alluded to, when examined with high powers (Hartnack: *ocular vii. objective 3*), exhibits many fine vertical striae, which with *ocular No. ix.* appear as fine tubes destitute of special walls; they vary in number at different points, but are on the whole most numerous posteriorly. In certain regions, however, the basement membrane appears homogeneous, and no trace of the canals can be discovered. The diameter of these tubules varies from that of mere processes of the cells to that of ordinary capillaries; above and below

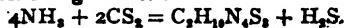
they not unfrequently widen out and become trumpet-shaped. Lymph-corpuscles are visible in their interior, especially in the dilated portion. No apertures are discoverable in the epithelial investment corresponding to the mouths of these tubules. The tubules appear to open into small cavities, of irregular form, lying immediately beneath the *Tunica propria*. In surface sections, the tubules appear as a narrow mesh of vessels lying close beneath the epithelium. A similar structure is exhibited, though less distinctly, by other mucous membranes. Thus, in the trachea and larynx the vertical canals are fewer in number, whilst in the urethra the basement membrane is altogether absent. It has not hitherto been found possible to inject these canals, and their connection with the lymphatics still remains doubtful.

Note on Recurrent Vision.—Professor C. Young, of Dartmouth College, U.S., states that in the course of some experiments with a new double-plate Holtz machine he observed a very curious phenomenon. The machine easily gave intense Leyden jar sparks from seven to nine inches in length, and of most dazzling brilliance. When he screened his eyes from the direct light of the spark, in a darkened room, the illumination produced was sufficient to render everything in the apartment perfectly visible, and, what was remarkable, every conspicuous object was seen twice, at least, with an interval of a trifle less than one-quarter of a second, the first time vividly, the second time faintly. Objects may often be seen a third and sometimes even a fourth time, but then only with great difficulty. The appearance presented was precisely as if the object had been suddenly illuminated by a light at first bright, but rapidly fading to extinction, and as though during the illumination the observer were winking as fast as possible. Professor Young obtained the best effect by fixing in front of the machine, and at a distance of eight or ten feet from it, a white screen-bearing a black cross, with arms about three feet long and one foot wide, made of strips of cambric. That the phenomenon was really subjective, and not due to a succession of sparks, was shown by swinging the screen from side to side. The black cross at all the periods of visibility occupied the same place, and was apparently stationary. The same was true of a stroboscopic disc in rapid revolution; it was seen several times by each spark, but each time in the same position. Professor Young remarks that, whatever may be the true explanation of the phenomenon, it at least suggests the idea of a reflection of the nervous impulse at the nerve extremities—as if the intense impression upon the retina, after being the first time propagated to the brain, were thence reflected, returned to the retina, and by travelling from the retina again to the brain renewed the sensation. He has hence proposed to term it "recurrent vision." Professor Young's paper is published in the *Amer. Jour. Sc.* vol. iii. No. 16.

Action of Quinine on the White Corpuscles of the Blood.—A paper appeared in the *Practitioner* for June by Dr. Geltowsky, containing an account of some experiments he has recently undertaken at the Brown Institution of the University of London, to determine the effects of quinine upon the white corpuscles of the blood. He finds that quinine arrests the movements of the colourless globules of the newt's blood if it be used in the proportion of one part to eight or nine hundred. It is remarkable that the globules of the blood of the female resist the action of quinine longer than those of the male. He finds moreover that the globules of the blood of animals already enfeebled by loss of blood in previous experiments resist the action of quinine a shorter time than the globules of animals entirely fresh. The solution of quinine, whether it be in water or in serum, acts with the same force. As regards the solution of quinine in serum, however, it is singular that the movement of the colourless globules ceases in a much shorter time when the serum is not perfectly fresh, although its reaction be neither more nor less alkaline than that of normal serum. The limit at which he finds quinine to stop the movements of the corpuscles is with one of the alkaloid to 2100 of blood. One part to 4000 had no action at all, either with the blood of man or of the guinea-pig. He remarks, in conclusion, that though quinine clearly possesses the power of arresting the movements of the corpuscles, this action can perhaps only be obtained on the stage of the microscope. On injecting into the blood doses which cause the death of the animal, quinine is without effect on the colourless blood corpuscles. Even if the quinine had the same influence on the colourless corpuscles of the blood in the interior of the organism as it has under the microscope, it would still be impossible to explain by the action of quinine on these corpuscles the cure of certain maladies under treatment by this drug, for according to the preceding experiments it is necessary to employ one part of quinine to 2800 parts of the blood of man. This in the case of a man in whom the quantity of blood is from 15 to 20 lbs. would amount to almost one drachm of quinine. In a critique on the foregoing paper in a subsequent number of the same journal, M. Binz, whose observations have thus been confirmed, remarks that it should never be our object to kill the colourless blood corpuscles in the human body with quinine. They are necessary for life, and their death would be our death: all that can be expected or required is that in certain forms of disease in which they are produced in excessive quantity their numbers and their energies should be reduced.

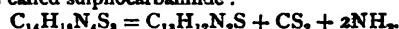
Chemistry.

Derivatives of Sulphocarbamic Acid.—At the Leipzig meeting, Hlasiwetz and Kachler (*Tageblatt*, 116) described the following reaction: When carbon disulphide and ammonia come together in the presence of a third body like camphor, phenol, &c., which merely exercises a catalytic action, they produce very beautiful, large, and nearly colourless crystals of a compound of somewhat unstable character, which is formed in the following manner:



When exposed to a weakly oxidising agent, iron chloride being preferable, this body, which may be regarded as the NH_4 salt of $\text{C}_2\text{H}_4\text{N}_4\text{S}_2$, undergoes the following change:

$2\text{C}_2\text{H}_4\text{N}_4\text{S}_2 + \text{FeCl}_3 = \text{C}_2\text{H}_4\text{N}_4\text{S}_2 + 2(\text{NH}_4\text{CNS}) + 2\text{NH}_4\text{Cl} + \text{Fe}_2\text{Cl}_3$. $\text{C}_2\text{H}_4\text{N}_4\text{S}_2$ is a body which crystallises in beautiful brilliant scales that are nearly insoluble in cold water, but are decomposed when heated with it into carbon disulphide, ammonium sulphocyanide and sulphur. Aniline gives magnificent prismatic crystals of a corresponding compound having the composition $\text{C}_{14}\text{H}_{18}\text{N}_4\text{S}_2$, that can be recrystallised from alcohol, but which with boiling water quickly decompose, giving beautiful crystalline plates of a sulphurea containing C_6H_6 , that Hofmann has called sulphocarbanilide:



As regards their constitution, the new bodies appear to be nearly allied to sulphocarbamic acid and sulphurea.

The Occurrence of Rubidium in Plants.—It has been found by E. Pfeiffer (*Chem. Centralblatt*, 33, 520) that this metal is present in the ash of the beet-root grown in the north of France, one kilogramme containing on an average 1.75 grammes of the chloride of this metal, or the plants grown on one hectare (2 acres, 1 rd., 35 p.) of land will take up 255 grammes of the chloride of this metal from the soil. The ratios of the chlorides of rubidium, sodium, and potassium in the ash of the beet of this district are as 1 : 126 : 331. Grandjean has likewise detected caesium in these chlorides. While the beet takes up no lithium, the tobacco grown in this district contains potassium, rubidium, and lithium, but only a trace of sodium. The rape grown in this locality contains potassium and sodium, but absorbs neither rubidium nor lithium.

The Influence of Time on Chemical Reaction.—Becquerel, in the *Compt. rend.* 75, 52, describes the formation of a number of crystalline bodies by weak chemical reactions extended over long periods of time. In two electro-capillary apparatus containing a solution of lead in potash and one of gold respectively, lead oxide in crystals in one case and metallic gold in the other were formed after a lapse of two years. In a series of tubes hermetically sealed twenty years ago, changes had taken place in their contents developing the following bodies: crystals of aragonite formed from a piece of gypsum in a solution of potassium bicarbonate, the gypsum having almost entirely disappeared; rhombohedra of calcium carbonate; crystals of calcium arseniate that almost rivalled in beauty those occurring in nature (they were produced from a piece of gypsum lying in a solution of ammonium arsenate); crystals of a double salt of calcium and potassium sulphate deposited from solutions of gypsum and alumina in potash; well-developed rhombic crystals of lead carbonate by the action of potassium bicarbonate on galena; hydrated lead carbonate in crystalline scales with pearly lustre by the action of lead oxide dissolved in potash on a piece of limestone; as well as malachite and other products.

The Ferric Hydrates.—E. Brescius has endeavoured (*Jour. prakt. Chemie*, 3, 272) to determine the constitution of some of the hydrates of ferric oxide. He examined the hydrate thrown down by ammonia of specific gravity 0.99 from a solution of ferric chloride of the specific gravity 1.01, but it gave no formula. This hydrate is very hygroscopic; when placed over sulphuric acid, it did not give a constant weight till after the lapse of six months. At 100° it begins to lose some portion of the water chemically combined with it. When placed in water for some time, it gradually loses the property of dissolving in acid, and becomes to some extent soluble in water, from which it can be precipitated by the addition of acid. On removing the water mechanically entangled in the hydrate by means of alcohol and ether and with the aid of a Bunsen filter, he obtained a powder having the formula $\text{Fe}_2\text{O}_3 \cdot 2\text{H}_2\text{O}$.

The Gases contained in Coal.—A number of specimens of English coal have been examined by E. v. Meyer with the view of determining (*Jour. prakt. Chemie*, 5, 407) the amount and constituents of the gases entangled in its mass. The gases varied greatly in amount and quality. In a specimen from the Bewick Main Colliery they consisted of 5.5 per cent. of carbonic acid, 6.5 per cent. of marsh-gas, and 85.6 per cent. of nitrogen. In three specimens from the Wingate Grange Colliery there was much more gas, the mixture consisting of from 85 to 90 per cent. of marsh-gas, 10 to 15 per cent. of nitrogen, and only a trace of carbonic acid. As a rule, the proportion of carbonic acid increases as that of marsh-gas decreases, and in some kinds of coal the occluded gases are condensed into one-third their volume.—More recently Kolbe has published in his journal (*Jour. prakt. Chemie*, 6, 79)

a note on the gases enclosed in the earthy brown coals from Bohemia. They contain no marsh-gas, but from 80 to 90 per cent. of carbonic acid, and an appreciable quantity of carbonic oxide, amounting in one case to 3 per cent.

The Formation of Transparent Crystals of Salt.—Mohr showed that salt was deposited in crystals resembling rock-salt by allowing its solution to become supersaturated by very slow evaporation, and inducing the excess to deposit, not at the surface of the liquid, but on the bottom of the vessel. It has recently been noticed by Buchner (*Zeitschrift für Chemie*, vii. 736) that the same thing happens on introducing a hygroscopic salt of some kind into a concentrated solution of sodium chloride. When iron chloride or magnesium chloride is used, the cubes are perfectly transparent, and exactly resemble rock-salt. It is highly probable that the larger proportion of magnesium chloride met with in the mother-liquors of salt-beds may have been an active agent in the deposition of the rock-salt.

Distribution of Lithium in Vegetable Structures.—It is stated by Focke (*Abhandl. naturwiss. Vereins zu Bremen*, iii. 270) that when this metal forms a constituent of a plant, it is met with most abundantly in the leaf, in less amount in the parts of the stem or the flower, a few pieces of a leaf often being sufficient to show the reaction. It is present in not inconsiderable amount in species of *Thalictrum*, *Carduus*, *Cirsium*, and *Salvia*, in two varieties of *Samolus*, and *Lathyrus tuberosus*. Many species of plants growing in the same soil contain no trace of lithium. From his examination of the plants that absorb the salts of this metal, Focke has been led to the belief that for certain of them to thrive a supply of lithium is absolutely necessary. A somewhat greater number of plants thrive preferably on soil containing this metal, and take up its salts when possible, although an absence of such compounds seems to cause them no injury.

Intelligence.

The annual general meeting of the German Geological Society was held during the last week at Bonn.—The Ungarischer Naturforscherversammlung met at the same time at Hercules-Bad, Dr. Kubinyi presiding, with Professors Szabó and Róza as vice-presidents.—The next general meeting of the Austrian Association is postponed to some date next year, while the Exhibition is open at Vienna.—The next Italian Scientific Congress commences on the 5th inst. at Rome.

New Publications.

- BIESIADECKI, A. Untersuchungen aus dem pathologisch-anatomischen Institute in Krakau. Wien: Braumüller.
- CARUS, Victor. Geschichte der Zoologie. Munich Series.
- COMMISSION internationale du Mètre. Procès-verbaux des séances du comité de recherches préparatoires. Paris: Viéville et Capiomont.
- CORNU, M. Monographie des Saprolegniés. Paris: Martinet.
- DE-BOSIS, F. La Caverna ossifera di Frasassi. Ancona: Mengarelli.
- DESNOYERS, L'abbé. Objets trouvés dans la Loire durant l'été de 1870. Orléans: Jacob.
- EXNER, S. Ueber die physiologische Wirkung der Iridectomy. Wien: Gerold's Sohn.
- FLAMMARION, C. Vie de Copernic et Histoire de la Découverte du Système du Monde. Paris: Hachette.
- HESS, W. Bilder aus dem Leben schädlicher Insekten. Die Käfer. Leipzig: Wilferdt.
- HIPPAUF, H. Lösung des Problems der Trisection mittelst der Conchoïde auf circularer Basis. Leipzig: Teubner.
- HOFMANN, F. Berechnung des Vorübergangs der Venus vor der Sonnenscheibe. Bayreuth: Grau.
- JOACHIMSTHAL, F. Anwendung der Differential- und Integralrechnung auf die allgemeine Theorie der Flächen und der Linien doppelter Krümmung. Leipzig: Teubner.
- LANDOIS, L. Die Lehre vom Arterienpuls. Berlin: Hirschwald.
- LANGLET, J. B. Étude critique sur quelques points de la Physiologie du Sommeil. Paris.
- MATTEI, G. Gli Antisettici e Progresso nuovo di Conservazione dei Corpi animali o loro parti. Cremona: Ronzi e Signori.
- MONTIER, J. Éléments de Thermodynamique. Paris: Gauthier-Villars.
- PORTANOVA, S. G. Errori e Delirii del Darwinismo. Napoli: Accattonelli.
- SCHROEDER, E. Lehrbuch der Arithmetik und Algebra für Lehrer und Studirende. I. Band: Die sieben algebraischen Operationen. Leipzig: Teubner.
- SONDERHOF, A. Beiträge zur höheren Geodäsie. Leipzig: Teubner.
- VERDET, E. Théorie mécanique de la Chaleur. Paris: Pradhoux et Violle.
- VIOLET-LE-DUC, E. De l'Étude de la Géographie et de la Topographie dans l'Armée. Paris: Dumaine.
- WOLDRICH, J. N. Ueberblick der Urgeschichte der Menschen. Wien: Beck.

History.

Notabilia from the Papers of Stockmar. [Denkwürdigkeiten aus den Papieren des Freiherrn Christian Friedrich von Stockmar.] Arranged by Ernst Freih. von Stockmar. Brunswick : Vieweg.

THE late Baron Stockmar himself likens his personal action in the public affairs of Europe to that of the sower of the seed. Fostered by kindly outward and palpable influences, the plant grows up; these are taken as the sole agents, and the careful hand which hid the germ in the right spot at the fitting moment goes unrecognised. This condition of his career was, he adds, fully accepted by him, "and," continues his son at the close of the biographical sketch with which the present volume opens, "as Stockmar himself was content with this obscurity before the world during life, this book, true to his own feeling, but slightly raises the veil for posterity." A tantalising announcement! Still in spite of the reticence imposed by filial piety, the succeeding chapters furnish considerable material illustrative of European history from 1817 to 1857, and of the Baron's personal share in the dynastic and political negotiations carried on during that eventful period. And at the same time they furnish the key to the obscure action of so highly gifted and sagacious a politician. As in science he only discovers who proves, so in politics he only gains public credit for statesmanship who through the toil and antagonism incident to public life can achieve the practical recognition of his policy by a nation. For this glorious but arduous career, Stockmar's antecedents, first as the citizen of a minor German state, and afterwards as the political adviser of a minor German prince, afforded no adequate training. And, too, being naturally inelegant, and unable to master the science of debate, he could never have exercised influence as a public speaker. But, brought into close relations with a prince who could appreciate his single-minded devotion and rare political insight, his natural capabilities developed in a congenial atmosphere, and the *ai-devant* physician ranks in the first order of consulting politicians.

Baron Stockmar's career may be briefly summed up. While acting as head physician to the Coburg contingent, incorporated with the allied armies during the campaigns of 1814 and 1815, he attracted the notice of Prince Leopold, who appointed him his body physician upon his marriage with the princess Charlotte. Upon her death in 1817, Stockmar's deep and affectionate sympathy cemented the bond between him and his royal master. From that day forward he became not only the faithful servant of the house of Coburg, but its most valued adviser and trusted agent. His medical office was soon exchanged for those of private secretary, treasurer, and comptroller of the household, and in 1821 he was ennobled. After 1831, when Prince Leopold accepted the Belgian crown, the Baron acted as his confidential agent in this country. In 1839 he accompanied Prince Albert of Saxe-Coburg to Italy, and in the autumn of the same year King Leopold and Stockmar, who were together at Wiesbaden, received the announcement of the Prince's engagement to Queen Victoria. In the following January he arrived in London to act for the Prince in the settlement of the marriage treaty with the English government. For many years after the Queen's marriage his visits to the English court were long and frequent. He took a final farewell of England in 1857; his latest services to our royal family having been given in aid of the negotiations for the marriage of the Crown Princess of Prussia. His closing years were passed in retirement at Coburg, where he died (1863) in his seventy-seventh year, a few months after King Leopold.

Baron Stockmar was wont to ascribe much of his success as confidant and counsellor of royalty to his medical

training. In 1853 he writes: "My initial study of medicine was a fortunate step; but for the knowledge thus gained and the insight, both psychological and physiological, thus acquired, my *savoir-faire* must often have gone a-begging." It seems to us that his good fortune was in some degree also due to a prudent avoidance, both for himself and his patrons, of all doubtful responsibilities. His refusal to take any share in the medical treatment of the princess Charlotte, and his rejection of office under the short-lived government of the archduke John, are signal instances of this cautious spirit. In both cases the event justified Stockmar's decision. The passages of European history upon which this volume throws special light are the negotiations between Prince Leopold and the five great powers touching the sovereignty of Greece and the crown of Belgium, and also the complicated transactions between the Frankfort parliament and certain of the German sovereigns. The historical student may profitably compare the statements presented by these memoirs—statements, however, strictly limited to the Baron's personal action—with the current histories of these events.

The details and observations bearing upon the affairs of Germany during 1848–1851 merit special attention, and can leave no doubt that a solution of the great problem of German unity was not then practicable amidst the inextricable confusion among the princes and statesmen of that country. Stockmar himself was strongly in favour of a Prussian hegemony; he was for including Austria in the new-formed confederacy, with the exclusion of the non-German members of that empire. Of course the refusal of the Vienna government to entertain such an arrangement, and the rejection of the imperial dignity by King Frederick William IV., together with the humiliation that prince met with at the hands of Austria, proved the futility of the half-measure advocated by Stockmar, and pointed out the remedy against future failure applied by Prince Bismarck in 1866.

The Baron's views upon the British constitution cannot fail to interest English readers. He examines and criticizes our polity exclusively upon one point, the relations between the crown and the parliament, parliament with him meaning the House of Commons. Two principles are emphatically set forth by him, first that the sovereign should act independently of party; secondly, that in all questions touching the interests, the pecuniary interests especially, of the crown, parliament should waive all party considerations to carry out the wishes of the sovereign. Stockmar's constitutional theory is formulated in a paragraph worth quoting; he writes, in 1851:—

"One want especially makes itself felt just now in England; that of able statesmen. Thereby the inconvenience we have suffered since the Reform Bill (of 1832) goes on increasing, namely, the growing omnipotence of the Commons, and its steady encroachment upon the province of the executive. A succession of able premiers alone could check this evil. The broad distinction between a republic and a constitutional monarchy is neither duly propounded nor adequately upheld. Yet its maintenance is the first duty of the minister. It must be brought to bear whenever the Commons, consciously or unconsciously, employ the form of the constitution to jeopardise its spirit, and, unsuspected by the people, to bring the country under a form of government other than its own. Such an attempt on the part of the Commons must be most strenuously resisted by the minister. It then becomes his duty publicly to assert the fundamental maxim: 'You have a constitution which the majority of the people desire to see maintained; and I will never permit a minority like the House of Commons to cheat the majority of the people and rob them of their rights.' . . . It is with a parliament as with a regiment; it is worthless and useless without an able leader—as is the minister, so is the parliament."

Is it conceivable that any English statesman would take in hand to put the precepts of such a political manual into practice? It is noteworthy that Stockmar has not a word to say upon the position and duties of the House of Lords in the British polity. The difference between that assembly

from the ideal of an upper chamber sketched by himself, a body called to its functions by popular election, solely on the score of talent, and with a temporary tenure of office, perhaps explains this conspicuous omission.

Several points of interest in this book must be passed over for want of space, but we must recommend to the reader's notice, as one of its most attractive features, the character sketches of the royal and distinguished persons with whom Stockmar was brought into contact. These portraits, which mark the connoisseur of men and manners, are drawn with a firm and discriminating hand; in some of them, too, a natural correspondence in the personal character of the respective originals with the course and upshot of their political action is distinctly traceable. In one case, however, prejudice seems to have warped the Baron's judgment. Whatever faults a severe critic might impute to Lord Palmerston, no one would now uphold the verdict that so astute and cool-headed a statesman had, at any crisis of his career, "committed so many follies as to justify the suspicion that he had lost his wits." It was Stockmar's belief that an indiscretion of Palmerston had afforded Louis-Philippe and Guizot a pretext for their breach of faith in the wretched business of the Spanish marriages; the English minister was consequently included in the deep-rooted antipathy cherished by the Baron against every one who had contributed to the success of that disgraceful intrigue. The leading circumstances of this business are related, and their mutual bearings pointed out with minute carefulness; more efficacious means could not have been taken to affix an indelible stigma upon the French king and his chief adviser.

GEORGE WARING.

Oeuvres du Cardinal de Retz. Tomes I. II. Nouvelle édition.
Par M. Alphonse Feillet.

THIS edition forms part of the series, *Les grands Écrivains de la France*, published under the direction of M. Ad. Regnier, and, like its predecessors, it aims at restoring an absolutely correct and authentic text, and at exhausting, to all intents and purposes, the work of annotation. Treated in this manner, a bare quarter of the cardinal's *Mémoires* occupies two thick volumes, and the editor's industry is necessarily more conspicuous than his judgment, when the object in view is to communicate, without exception, *all* the information that can be collected respecting the author and his work. There is scarcely a proper name in the text that does not suggest a circumstantial biographical note; parallel accounts by other contemporaries of the same events are carefully compared; the various readings of different MSS. and the early editions are given; and what is still more interesting, we are enabled to follow the author in the very act of composition; for though, of course, the text is based upon the final form of the autograph MS., the critical notes mention if a word is crossed out or a phrase altered or transposed, and might almost serve as a substitute for the sight of the original. Work of this kind is more useful than brilliant, and M. Feillet is not disposed to hazard the completeness of his performance by premature display, for the biographical notice which should have appeared at the head of the *Mémoires* is still delayed, doubtless to enable the author to incorporate anything of interest that may be discovered in the subsequent course of his editorial labours.

There is a general tendency amongst French historians to disparage the political abilities as well as the veracity of de Retz; and in an earlier work, *La Mistre au temps de la Fronde*, M. Feillet seems to have shared the common disposition; but M. Bazin is the only careful student of the *Mémoires* who has been able to resist the fascination of their

marvellous cleverness, and their present editor is so far converted as to render quite even-handed justice to his author on all controverted points of fact. His general inferences and final appreciation are naturally reserved for the *Life*; but meanwhile the ordinary reader can form his own opinion *en connaissance de cause*, rejecting those of Retz's statements which are proved to be inaccurate, suspecting, perhaps, those which are unsupported, but relieved from the unsatisfactory impression that everything is untrustworthy alike. These two volumes stop short in December 1649, just before M^{me} de Chevreuse arranges the interviews between the coadjutor and Queen Anne, when the intrigue is at its liveliest point, just before the arrest of the princes, an episode that, tried by Retz's peculiar code of conspirators' honour, needs a good deal of explanation. But they include, besides some of the most brilliant writing in the whole work, all that part which is of most importance to illustrate the growth and development of the Retz of history, who finally blends with or supersedes the Retz of autobiographical fiction. It is a curious fact that by far the most impudent of de Retz's inventions, his most unfounded fabrications, relate to the time of his youth and early manhood, before there was any reasonable possibility of his having become as distinguished as he always meant to be and tried to persuade himself he always had been. Up to the *Journée des Barricades* inclusive—and in August 1648 Retz was nearly thirty-five—he had never filled the space in public attention which he held to be his by right; and as he had no intention of posing before the world as one of its unappreciated great ones, he was constrained to persuade himself that the trifling successes, which were all he could claim hitherto, were really straws showing the current that was subsequently to bear him to power and popularity. But when he had actually become the most powerful and the most popular man in Paris (with one exception that could scarcely give umbrage to a reasoning being), he had no motive for systematically perverting the truth; on the contrary, his self-esteem, one of those defects that do half the work of a virtue, would naturally lead him to record with complacent accuracy all that he really did when he was free to do his best, or, as some would say, his worst. For the insurrection which he helped to lead is often condemned as vexatious, merely because it was unsuccessful—an impious rebellion against the fated glories of the Grand Siècle. The touch that troubled the political surface just when the calm waters of absolute monarchy were coming into sight was not precisely that of an angel's wing; nor was the process a healing one. But history, except of recent times, does not necessarily judge by results. While the monarchy flourished, the Fronde seemed an abortive reaction against the central authority in favour of feudalism and anarchy; but when the monarchy had fallen by its own weight, the Fronde, viewed as a premature revolution, might claim to have been before its age instead of behind, and with as good reason. For liberty has always been found attainable by the coalition of two estates out of three; and if the clergy—that is to say, Retz—had been able to negotiate an alliance between the nobility—that is to say, M^{me} de Longueville and her allies—and the people—that is to say, the shopkeepers of Paris—it would have been possible to limit the powers of the crown, and perhaps to establish a durable equilibrium in the state. But there is foundation in fact for the contradictory judgments passed on the Fronde, for there were from the first two parties in the anti-Mazarin camp: the coadjutor and the Duc de Beaufort with the parliament representing the popular and revolutionary side, and the nobles with their ancient claims and obsolete ambitions, who were bribed to abandon their allies of the

moment by the promise of a position of unexampled brilliancy in the most brilliant society that had then been known. But the alliance between the crown and the aristocracy was never hearty; it was a selfish bargain, in which both were overreached, the nobles first because it was they who lent to the monarchy the splendour they professed to borrow from it, the king afterwards, because, to purchase the neutrality of a narrow class, he had sacrificed the prosperity of the whole nation. The aristocratic Fronde was certainly ridiculous enough, with its wars and peaces, its treaties and alliances, the mere parody or caricature of serious history, a storm in a tea-cup, *la guerre civile tombée en guenouille*; but, after all, the end of the monarchy was nearly as inglorious as those expiring struggles of an independent military noblesse. Every one knows that the greatness of Louis Quatorze was vicarious, and half of it consisted in this, that during his minority he was the lawful sovereign of some dozen of men and women who were very nearly capable of upsetting a state that had just been fortified by Richelieu.

The motives and interests of the court and the Frondeurs in general were intelligible enough, but Retz succeeded in making for himself a position as singular as his vanity could desire. He was disinterested, not from virtue, but from a natural indifference to the stakes for which ordinary politicians play; he was a conspirator, partly for pure love of the work, partly from the love of fame in its airiest, least palpable shape, the breath of the multitude, not for any material reward, nor to realise a theoretic purpose. He had a few fixed principles of conduct, based on the inner light of a queer conscience, but he had no abstract convictions, no general principles of action, and for want of these his vast energy and versatile ingenuity led to little or no practical result. La Rochefoucauld is supposed to have been thinking of him in the phrase "Quelqu'éclatante que soit une action, elle ne doit pas passer pour grande lorsqu'elle n'est pas l'effet d'un grand dessein," and the reflection is more just than most of the same writer's avowed criticisms upon him. His ambition was too exclusively personal for a really great man; he tried to build a reputation that should be its own support, and he would have been jealous even of his own great deeds if he had believed they would serve to distract attention from the brilliancy of his individual character. In his schoolboy day-dreams he fancied himself a Caesar, but Rome was somehow always left out of the vision, and it is not impossible that, if he had been allowed to follow the profession of arms, he might have rested satisfied with uniting the attainable glories of, let us say, du Guesclin or Bayard and—the Chevalier de Lauzun. But he excelled in executing a change of front in the face of adverse circumstances; and when his father, a well-meaning man, whose honest self-deception he laid bare with gentle tolerance, insisted in bestowing upon the church, for the greater glory of God and His servants, the Gondis, "l'âme peut-être le moins ecclésiastique qui fut dans l'univers," the young Retz wasted very little time in vain regrets. It may be true, as he tells us, that he fought as many duels as he could, and that he arranged to run away with an heiress, all in order to get rid of the hated *soutane*; but it is more certain that he began to pursue the studies proper to his enforced calling at an age and with a zeal uncalled for in a prelate of family. He dedicated his first *thèse*, according to Tallement des Réaux, to saints, that he might not have to dedicate it to mundane potentates; but he acquitted himself more than creditably in the eyes of the Sorbonne, was victorious in public disputations, where he confounded an elder adversary out of St. Augustine, and actually took to preaching at all the fashionable churches in Paris.

At this time Richelieu was the model he had in his mind,

and his object seems to have been to rise to such ecclesiastical dignity as would allow of his pretending to the succession of the great cardinal—the archbishopric of Paris, which was a kind of heirloom in the family, being naturally the first stepping-stone to this result. M. Feillet is sceptical as to the reality of the plot to assassinate Richelieu in which Retz professes to have been concerned, but it should be borne in mind that Richelieu's death was a *sine quâ non* of the overthrow of his policy, so that to plan the latter, malcontents were obliged, at least in talk, to contemplate the former. At any rate, Retz's was amongst those ambitions that were disappointed by Louis XIII.'s unexpected fidelity to the counsels of his departed master; Mazarin was retained in power, and short as was the time accorded him by the king's illness, he put it to such good use that, when the new reign began, he was already master of the confidence and affections of the queen-regent. Retz would fain have superseded him in both, but it was too late; Anne was constant where a wiser woman would have been false on principle to all such politic gallants; and it is very doubtful whether, of the two candidates for her favour, she chose either the most able or the most virtuous. Both were clever, both were unscrupulous; neither had a large scheme of foreign or domestic policy, but Retz was a Frenchman and personally disinterested; his undoubted talents would have gone further in office than in opposition, and as inclination would have led him to make the regency a popular government, it would have been necessary to revive the traditions of the good old times of Henri Quatre. Mazarin was honestly desirous to carry on the policy of Richelieu, who is commonly supposed to have completed that of Henri, but there is one important difference between the two, for Richelieu's policy had no domestic aims, whereas Henri's had the prosperity of France, and the foreign policy, which with the latter was only a means to the other result, was by the cardinal made subordinate to the aggrandisement of the monarchy as such. In this spirit Mazarin records in his private note-book the reflection that to bring the affairs of France to the highest point of prosperity, it is only necessary "que les Français soient pour la France;" the parallel necessity, "que la France fût pour les Français," was not likely to occur to an alien adventurer. "Interest of state" with him means interest of statesmen, and he so far identified his cause with that of his royal mistress that in the *Carnets* he seems to have been unfeignedly surprised and hurt at the opposition of which he was the object. The effect is comical; we seem to hear Reynard the Fox bemoaning himself (in very bad French) because the hens and chickens do not approve of his appointment as prime minister.

The coadjutorship of Paris was a slight consolation to Retz for the disappointment of hopes that were not altogether unreasonable in themselves. The *Mémoires* are not to be relied upon implicitly for this period, during which, to keep himself before the reader, he gives undue importance to certain squabbles about precedence, in which he claims to have upheld the rights of the church and the see of Paris against all manner of powers and principalities. But these misrepresentations cover a background of fact, for the favour of those of his cloth was always one of the strings which the coadjutor kept in reserve for his bow. Despite his scandalous life, his old tutor Vincent de Paul had been heard to say of him that he "was not far from the kingdom of heaven;" "j'estimois beaucoup les dévots; et à leur égard, c'est un des plus grands points de la piété," is his own account of the matter; and he would have been perfectly in his element, if the circumstances of his age had been suitable, as the leader of a popular clerical opposition to the secular powers. Too late for this rôle, he was too early to

put himself at the head of a merely democratic movement, for besides that such a movement would have had to be half created, he distrusted the populace while bidding for its favour, and he disliked the thought of associating on equal terms with middle-class revolutionaries like Cromwell, whose first overtures he peremptorily declined. Yet in theory he thoroughly understood what was needed to make a successful revolution, and in practice he resolutely refused to commit high-treason unless the parliament would be a party to the act. The *gros bourgeois*, the citizens *en noir*, were the men he trusted, and whose support he valued, but they are just the men who will fight for an idea; not driven by pressing necessity like the mob, nor by insatiable appetites like the nobility, they could command both time and prudence, they only wanted a cause, and that Retz could not give them; but he may certainly claim the merit of having made the causes of his failure more intelligible than any other writer has done. The passage in which he describes (and probably antedates) the arts that founded his popularity with the class next below this is one of the most curious in the *Mémoires*. M^{me} de Maignelais, his aunt, was a *dévote*, and one of the charitable ladies who shared in Vincent de Paul's labours for the succour of the distress which was becoming a serious danger to the state. Through her agency Retz distributed large sums that were entrusted to him for political purposes amongst the virtuous poor of Paris, not the professees mendicants, but those whose praise was rather creditable to a churchman, especially while they and he kept the secret of how it was earned. The children were not neglected: "je connaissais Nanon et Babet," and the delighted aunt never failed to dismiss her *protégés* with the injunction, "Priez bien Dieu pour mon neveu; c'est lui de qui il lui a plu de se servir pour cette bonne œuvre." In the faubourgs of Paris in 1652, we are told, there were 12,000 families of respectable poor in distress, besides beggars, and if only half these were amongst the coadjutor's clients, his power is easily explained. Condé tried at one time to arm the most desperate amongst them, but he could neither control nor utilise them as soldiers, and before the end of the civil war the horrors which it added to those already existing had the effect of converting the poor, and the inferior clergy who were nearest to the distress, into Mazarinists or partisans of peace at any price.

Retz had no right to complain of their defection, because he had expressly declined the part of tribune of the people; to borrow his favourite metaphor, history is a comedy, and he preferred to perform before an audience in full dress. But before sinking to the level of a mere factious partisan leader, he had one more combination to propose, which is enough by itself to mark him as the equal of Mazarin in the shifty turns and tortuous tricks of statecraft. A civil war in France was incomplete without the Spaniard; the two countries were at war in 1649, but M. de Longueville, "qui avait déjà été de quatre ou cinq guerres civiles," and the aristocratic Fronde attached little importance to that circumstance, and were anxious to treat at once with the invader. Retz's exposition of the dangers and drawbacks to such a course is the more masterly because he disdains the support of vulgar moral and patriotic prejudices. The popular cry of the day was, "La paix et point de Mazarin;" by adopting this platform the Fronde assumed an intelligible attitude towards the court, and Retz hoped to succeed in committing the parliament to it as an ultimatum. The Spaniards were willing to accept the offer of mediation; by refusing it, Mazarin was expected to put himself more than ever in the wrong with the country. Turenne was ready to march to the support of the parliament, Paris was in the mood to rise as one man, fetch back its young king, and

install the coadjutor as his prime minister. If, on the other hand, matters did not proceed to extremities, the parliamentary and other Frondeurs would have achieved a great diplomatic triumph, and the country would have been pacified by their efforts; Mazarin must have disappeared, and the conduct of the government would naturally have passed into their hands. The timid loyalty of the parliament and sudden defection of Turenne's army, even more than the impracticable demands of the nobles, ruined this promising scheme, and Retz, with the elasticity of mind that characterized him, set to work undismayed to frame fresh schemes to save his own popularity with the masses, while he secretly encouraged his allies to make favourable terms for themselves at court.

It is unnecessary to speak of the ever fresh interest which his art lends to the story of all these contemptible intrigues; he may have altered a little here and there, but nothing but nature and life could have the variety, the intricacy, of the pictures that crowd his pages, and nature and life are dull and obscure as compared with this brilliant paraphrase and commentary on their secrets. The only reservation to be made with respect to his general trustworthiness for this period is that suggested by La Rochefoucauld: "Il a une grande présence d'esprit, et il sait tellement tourner à son avantage les occasions que la fortune lui offre qu'il semble qu'il les ait prévues et désirées." But this very fertility of resource may have helped to deceive his critic into believing him more *malin* than he really was. His candid enthusiasm for himself kept him back from many falsehoods if it led him into a few, and we have no difficulty in accepting Saint-Évremond's statement: "il découvrit le fond de son âme à ses amis" (amongst whom La Rochefoucauld was never reckoned) . . . "jamais courtisan ne fut moins dissimulé et plus sincère." His pride was of that magnificent kind that only condescends to show itself to superiors; his disinterestedness was partly pride, partly real indifference, and only served incidentally for ostentation. In person he was abstemious, awkward, absent; there was a large element of fantastic romance in his character which is quite lost sight of by the ordinary moral historians, who treat him as a mere vulgar firebrand or *brouillon*. In the civil discords he was scrupulous in adhering to the rules of the game as he understood it; he was entirely free from malignant passions, and, though it is almost a paradox to say so, considering his opportunities, he did singularly little harm either to individuals or the state. Some of the good that he might have done was lost by his own fault, some by fortune, who was not on the whole propitious to him; but his public life was not that of a bad or mischievous man. His personal character is too complicated to be dismissed in a paragraph, except by such a master of portraiture as himself; but the doubts which the *Mémoires* suggest are such as we expect the last years of an ambiguous life to solve, and we know that Retz died as he had lived, popular, amiable, and still notorious, for the whim had taken him to devote his princely revenues to the discharge of his still more princely debts.

M. Feillet has a new theory to suggest as to the lady to whom the *Mémoires* are professedly addressed. M^{me} de Caumartin, who is generally supposed to have that honour, was not on very intimate terms with the cardinal, though it is probable that the MS. was shown to her husband, and M. Feillet even conjectures that some notes on an extant MS. copy may be from his hand. But the *Mémoires* were evidently written for posthumous publication, not for the private amusement of any individual, and if they were addressed in imagination to a lady who might never read them, why is M^{me} Caumartin to be she? Why not M^{me} Sévigné, whose letters are full of friendly admiration for

"notre cardinal," and hopes that he may be persuaded some day to write the history of his life? Direct evidence is perhaps out of the question, but M. Feillet succeeds in showing in most cases where Retz adds to a name, So and So, "whom you know," "whom you visit," that the individuals mentioned are amongst M^{me} de Sévigné's acquaintances. Several other interesting questions are discussed in the notes and introductions, such as the date of the composition of the *Mémoires*, and whether Retz was nineteen or twenty-nine when he wrote the *Conjuration de Fiesque*; but the latter point will be treated more at length when the editor comes to the turn of that Machiavellian little pamphlet. We shall look anxiously for a fresh instalment of his conscientious and interesting work.

H. LAWRENNY.

Contents of the Journals.

GÖTT. gel. Anzeigen, Aug. 7.—Reviews Nippold's interesting book, *The Old Catholic Church of Utrecht*; and Liebrecht compares the stories in Grundtvig's *Danish Popular Tales* with similar ones in other countries.—Aug. 14.—Contains an appreciative notice of Tylor's *Primitive Culture*.—The publication of the first volume of Pertz's *Diplomata Imperii* (the Merovingian times) has called forth some reviews of books on the same subject, such as Bresslau's *Diplomata centum in usum scholarum diplomaticarum* (Aug. 28), and Gegenbaur's *The Monastery of Fulda in Carolingian Times* (Sept. 4). Pertz's national work contains 224 documents, 121 being genuine and 103 forged—the forgeries being as usual in the interest of the great ecclesiastical bodies of St. Denis, Le Mans, Treves, &c., just as the forged Anglo-Saxon charters are due to Malmesbury, Peterborough, &c. Historical students would be glad of such a handbook to English charters as Bresslau's is to German. A number of characteristic specimens, with sufficient explanations, is what is wanted: e.g. the knowledge of the continued use of the Greek Indictions (Sept. 1—Aug. 31) in papal documents down to A.D. 1087 shows us that a document should be dated in 811 instead of 812.—There is also a notice of Jähn's interesting book, *Ross und Reiter*.—Aug. 21.—Reviews August Baur's *Deutschland in 1517-25* (illustrated from the popular literature and pamphlets of the time).—Aug. 28.—Notices Brandes' *History of the Church Policy of the House of Brandenburg*; and gives a brief account of the globe at Vienna with the name "America" on it, which is valuable in reference to early geographical treatises on the New World.—Sept. 4.—Geiger contests the view expressed in Kückelhahn's *Johannes Sturm, Straßburg's erster Schulrektor*, that Sturm was one of those who led the advance of education; it is shown that he rather belonged to the reaction in the sixteenth century.—Sept. 11.—Contains a long review by Pauli of Stockmar's *Life*, so interesting to English readers from its frequent references to the princess Charlotte and our present Queen, and the state of English society and politics.

New Publications.

- BEYSCHLAG, Willib. Karl Immanuel Nitzsch. Eine Lichtgestalt der neuere deutsch-evangel. Kirchengeschichte. Berlin: Rauh.
 BLASINI, Giuseppe de. La Insurrezione Pugliese e la Conquista Normanna nel secolo XI. Napoli: Detken & Rocholl.
 BOUCHÉ-LECLERCQ, A. Les Pontifes de l'ancienne Rome. Paris.
 CHARAS, F. Études sur l'Antiquité historique, d'après les sources égyptiennes et les monuments réputés préhistoriques. 560 pages, 7 planches et nombreuses figures dans le texte. Paris: Maisonneuve.
 CURTIUS, Ernst. Beiträge zur Geschichte und Topographie Kleinasiens (Ephesus, Pergamus, Smyrna, Sardis). Berlin: Dümmler.
 HAHN, J. G. v. Sagwissenschaftliche Studien. 2. Liefg. Jena: Mauke.
 HALLÉGUEN, Dr. E. Armorique et Bretagne. Origines armoricobrettonnes, ouvrage accompagné de documents rares et inédits. Deux volumes. Paris.
 KLÜPFEL, K. Geschichte der deutschen Einheitsbestrebungen bis zu ihrer Erfüllung, 1848-1871. Erster Band: 1848-1865.
 MÜLLER, Wilhelm. Politische Geschichte der Gegenwart. V. Das Jahr 1871. Nebst einer Chronik der Ereignisse des Jahres 1871. Berlin: Springer.
 PLAUTA, P. C. Das alte Raetien. Berlin: Weidmann.
 PUYNOL, M. l'abbé. Louis XIII et le Béarn; ou Rétablissement du Catholicisme en Béarn et Réunion du Béarn et de la Navarre à la France. Paris: Soye.
 SCHWARZ, Ad. Der jüdische Kalender historisch und astronomisch untersucht. (Gekrönte Preisschrift.) Breslau: Schleitter.
 SPINELLO, Annali di Matteo di Giovenazzo. Edizione eseguita sopra una stampa del XVII secolo ignota; pubblicata per cura di Gennaro Vico e Giuseppe Dura. Napoli: Dura.
 VÁMBÉRY, Herm. Geschichte Bochara's od. Transoxaniens. 2 Bände. Stuttgart: Cotta.

Philology.

Grammaire hiéroglyphique, contenant les Principes généraux de la Langue et de l'Écriture sacrées des anciens Égyptiens, composée à l'usage des Étudiants par Henri Brugsch. Leipzig: J. E. Hinrichs.

Index des Hiéroglyphes phonétiques y compris des Valeurs de l'Écriture secrète et des Signes déterminatifs qui se rencontrent dans le Système graphique des anciens Égyptiens, composé et appliqué à son Dictionnaire hiéroglyphique par Henri Brugsch. Leipzig: J. E. Hinrichs. (Extrait de la Grammaire hiéroglyphique.)

M. BRUGSCH's work contains twenty chapters, one of which treats of the System of the Hieroglyphic Writing, fourteen of the Forms, and four of the Syntax. Two most important treatises are appended to it: (1) "A General Table of such Hieroglyphs as have Phonetic Values;" (2) "A General Table of the General Determinative Signs which are most used in the Hieroglyphic Writings." These tables, extracted from the bulk of the work by M. Brugsch, have been published separately with the title of *Index of the Phonetic Hieroglyphs, &c.*, so that the two books inscribed at the head of this review are in fact but one, the second being contained from beginning to end in the first. It is almost unnecessary to say that a work from the pen of M. Brugsch contains a vast amount of science and well-founded observation: indeed the author of the *Demotic Grammar, Geographical Inscriptions, and Hieroglyphical Dictionary*, has once more proved true to himself. I therefore can make no pretence to analyse minutely or sufficiently so new and so complete a book. I must content myself with quoting at random some of the observations my own studies have suggested to me about it.

And first, it seems to me that M. Brugsch has been somewhat misled by the idea that he was making a grammar à l'usage des étudiants. The beginner in the hieroglyphics is generally a man well versed in classical studies, and not devoid of philological notions: he knows Hebrew and Coptic more or less, and needs not the merely empirical grammar we are used to put into the hands of common beginners. Now M. Brugsch's grammar is merely empirical: instead of arranging his matter according to the peculiar genius of the tongue, he has arranged it according to the laws of the classical languages, and so tried as it were to force it into clothes which are unfit for it. Thus, although he is one of the few Egyptologists who are conversant with Coptic and Demotic, he has neglected those two forms of the Egyptian. Once only, in speaking of the verb, he expresses his ideas about the formation of the roots; and, from the few words he says there, we may easily gather what great results he might have realised had he thought proper to apply his attention to the investigation of origins.*

The great majority of Egyptian roots are biliteral, that is to say, include two radical letters which are sounded as one-syllable, and no more: s^m, to hear; q^eb, to refresh. The two radicals are not necessarily consonants: h^hā, to stand; āā, to be great; iū, to go; tā, to cry, contain either one consonant and one vowel or two vowels forming a diphthong. In the course of time these primitive roots underwent modifications by which the number of their constituent letters was raised from two to four, and then to three; indeed, most of them have got a whole retinue of quadrilateral and biliteral roots which are derived from them and possess the same value.

There are two means of modifying a root: (1) by repeating it; (2) by adding to it auxiliary letters.

i. Repetition is the simplest manner of increasing the sense of a root; and, therefore, in Egyptian, as well as in

* Grammaire, pp. 36, 37.

Digitized by

most languages, radical repetition is sometimes intended to mark an increase of the action. *QⁿN*, *to beat*, develops itself into *QⁿQⁿN*, *to give somebody a sound thrashing*. But this is rarely the case: repetition ordinarily is a modification of the word without any modification of the idea. *SⁿNSⁿN*, *to breathe*, *BⁿBⁿN*, *to spring*, have no more value than *SⁿN*, *BⁿN*: they are both of them mere variations of the words, corresponding to no particular shade of variety in the fundamental thought. The sole difference between them is that *SⁿN* is a monosyllable, while *SⁿNSⁿN* is a dissyllable, which goes against one of the most decided tendencies of the tongue, being that each root counts for one syllable. To overcome that difficulty, the Egyptians had no resource left but to drop one of the three last radicals, the first being always respected. Thus, *QⁿBQⁿB* becomes *QⁿQB*, by dropping the second radical; *QⁿBB* or *QBⁿB*, by dropping the third; *QⁿBQ* or *QBⁿQ*, by dropping the fourth; so that each biliteral monosyllable, being raised to the square, turns out to be the common stock for three trilateral monosyllables, all of them signifying the same thing.

2. Some of the auxiliary letters get intercalated between the radicals, apparently in order to raise the root from its biliteral to the trilateral state. The dentals *t* and *z* are rarely used for this purpose, and I know of no guttural employed for it. The most of the remaining letters are apt to play the part of first (*a*), second (*b*), or third (*c*) radical, according to the place in which they are set.

(a) The aspirates *a*, *h*: *QⁿB*, *to refresh*; *QⁿM*, *to find*; *BⁿN*, *to spring up*, give *AQⁿB*, *AQⁿM*, *HⁿBⁿN*. (b) The dentals *t*, *d*, and, sometimes, *t'*, *z'*: *SⁿM*, *to hear*; *NⁿM*, *sweet*, give *SⁿTM*, *NⁿTM*, or *NⁿZⁿM*. Then every root of which the last radical is a consonant has, besides its primitive form, a nasal form, the *n* of which is suffixed to the first radical and prefixed to the last: *SⁿD*, *SⁿT*, *to tremble*, give *SⁿND*, *SⁿNT*. (c) The aspirates *h'*, *χ*: *QⁿB*, *QⁿBH'*; *DⁿB*, *to pray*, *DⁿBH'*; *SⁿB*, *a door*, *SⁿBχ*; *AB*, *to rise*, *to penetrate*, *ABχ*. The nasals *n*, *m*: *MⁿD*, *way*, give *MⁿTN*; *HⁿB*, *χⁿB*, *to plough*, *HⁿBN*, *χⁿBN*; *χⁿT*, *to seal*, *χⁿTM*; the additional *n* may be doubled thus: *MⁿTN*, *MⁿTENNⁿ*, *HⁿBN*, *HⁿBⁿNNⁿ*. In a root of which the second radical is a nasal, when the last happens to be a dental *d*, *t*, *t'*, or *z'*, the intercalated *n* attracts a *n**l* final as if it were the last radical, and the dental being assimilated, disappears from the writing as well as from the pronunciation: thus, *SⁿWT* ($\sqrt{W^n}D$), *to suffer*, becomes *SⁿWⁿND* or *SⁿWⁿNT* and *SⁿWⁿNNⁿ*; *χⁿNT*, *to run up a river*, *χⁿNNⁿ*.

The remainder of the auxiliary letters possess a grammatical value. *s*, *d*, *r*, and *m* (*mā*), prefixed to the root give to it a causative significance: *HⁿN*, *to incline*, become *SHⁿN*, *DⁿHⁿN*, *RⁿHⁿN*; *HⁿĀ*, *to stand*; *SHⁿĀ*, *to raise*. Three of these letters may be traced up to roots still living in the tongue: *r* to *ARI*, *ṛ*, *to do*; *d* to *DŪ*, and *m* to *MĀ*, *to give*: the origin of *s* is unknown.

Besides these absolute forms, a careful analysis of the texts enables us to affirm that there is in the old Egyptian something analogous to the construct state of Semitic philology. Every root biliteral or trilateral may accept the suffix *t*, vocalised often *ṭt* or *ṭd*: *MⁿR*, *to love*, *MⁿRT*, *MⁿRⁿT*, *MⁿRTⁿ*. Until now this has been considered as denoting exclusively the passive of the verbs: *MⁿR*, *to love*; *MⁿRT*, *MⁿRⁿT*, *MⁿRTⁿ*, *loved*. But it is used in many places where it cannot possibly have an intransitive value; in *Papyrus Abbot*, *At-tu qim-tū-w m azā*, the text does not admit of a passive translation, "He was found guilty," but only of an active one, "They found him guilty." Then *ṭt*, *ṭd*, occurs at the end of such words as *ARI-T*, *an eye*; *DŪ-T*, *a hand*; *HⁿĀ-T*, *a beginning*, *a chief*, which it is impossible to view in the light of passive formations (*Pap. Anastasi*, ii. 6, 2): *ibex-T art-tū-k er seb nū pet*, "Thy eye shines more than a star in the sky." That its adjunction was entirely facultative, and did

not alter the signification of the roots, is proved by variations of the same text in which one manuscript gives the absolute state of a word, while another has the construct state of the same. Thus, taking for instance the above-quoted passage in *Papyrus Anastasi*, ii. 6, 2, we have *art-tū-k*, and in *Papyrus Anastasi*, iv. 5, 10, *art-ek*. If we pass from the older texts to the newest ones, we find: (1) that the construct state of hieroglyphical times is extant in Coptic *μωρ*, *to be born*, construct state *μαστ* . . . , &c.; (2) the old roots have for the most part two Coptic forms, the one responding to the absolute state of the root, Coptic *ḥā*, *a chief*, from Egyptian *H'Ā*, the other responding to the construct state of the same, Coptic *ḥōr*, *the first*, *the chief*, from *h'ō-tū*. Thus it is that we are able to reject the last remnant of Champollion's theory concerning the graphic expletives. The *t*—written, now with a mere segment of the circle \textcircled{t} , now with a segment of the circle and a perpendicular line—which follows *ad libitum* almost all the words, and has been mistaken for an expletive, is, when not a feminine mark, a mark of the construct or emphatic state we have pointed out. Its origin is evident: it comes from the essential verb *ta*, which helps to form the tenses. Suffixed to a root, it adds an idea of being and reality which transfers it from the abstract to the concrete state, and enables it to receive grammatical particles, or to play its part in the general construction of the phrase.

Egyptian roots are not, properly speaking, nouns, adjectives, or verbs: they express the idea independently of grammatical category, and may, according to their relative position, play the same part that nouns, adjectives, and verbs, play in our modern languages. Thus, *√AA* may signify *great*, *greatness*, *to be great*; *SⁿM*, *to hear* (*to obey*), *obedience*, *obedient*, and are therefore not definite nouns, adjectives, or verbs, but only possibilities of nouns, adjectives, or verbs. Their grammatical category resides not in their material form, but in the mind of him who speaks or hears. Hence it comes that the Egyptians possess nothing which we may say corresponds exactly to our declensions or conjugations. By dint of personal pronouns affixed as signs of the subject to the roots of appellative value, they contrived to build small phrases *MⁿR-A*, *MⁿR-K*, by which they devolved the possession of the idea expressed by the root upon one of the three persons, but without creating any definite grammatical category. *MⁿR-A*, *MⁿR-K*, signify, after a general fashion, *love-o' mine*, *love-o' thine*; but we were not right to interpret them, when taken isolatedly, by *I love*, *thou lovest*, more than by *my love*, *thy love*: it is only their position in a sentence which determines the special value we are obliged to give them for the nonce, and enables us to see whether they are to be rendered by one of our substantives or by one of our verbs. *MⁿR-A ATⁿW-A* is translated: "I love my father," and we say that *MⁿR-A* is the first person of a verb the regimen of which is *ATⁿW-A*. But *MⁿR-A* and *ATⁿW-A* are two locutions constructed on exactly the same pattern, and which, when isolated, express the attribution to the first person of the general ideas *love*, *father*; being united in the same proposition, they become the two terms of an equation, *MⁿR-A = ATⁿW-A*, *Love-o' mine = Father-o' mine*, where the relative position of the factors induces us to bestow upon *MⁿR-A* the quality verb, *I love*, while in another equation *MĀĀ NUTⁿR MⁿR-A*, *God sees my love*, we would be obliged to give it the substantive value of *my love*. *MⁿR-A*, being alike a substantive or a verb, may, in its verbal impersonations, denote the past as well as the present, and the future as well as the past. The Egyptians contented themselves with indicating the fact of the action being done, and with naming the doing person; they left to the hearer's or reader's mind the care of ascertaining, according to the tenor of the phrase, the moment of

duration in which the action is, has been, or will be present.

To remedy the inconveniences resulting from such a system, they used a number of auxiliary words which, being set before a root or after it, but without ever being blended into it, limit its extension. Four roots, *a*, *p*, *t*, *n*, when vocalised with *ā*, into *Aā*, *Pā*, *Tā* [*Nā*] = *āN*, were considered in the light of auxiliary verbs, and, when vocalised with *ā*, into *Pā*, *Tā*, *Nā*, become the articles *the (le)*, *the (la)*, *the (les)*: so it was enough to see a root preceded by an *ā*-form to be sure that it was endowed, for the nonce at least, with the value of a verb, or to see it preceded by an *ā*-form to be sure that it was endowed, for the nonce at least, with the value of a noun. *Tā Z°D-A*, or *Tā¹-A Z°D*, signifies "my word;" *Tā Z°D-A*, or *Tā¹-A Z°D*, "I speak;" *Nā AR-A*, or *NA¹-A AR*, "my deeds;" and *āN AR-A*, *āN A AR*, "I do." Every auxiliary verb may be combined with the personal pronouns after three different fashions, the subject being affixed (1) to the sole auxiliary *Aā-a M°R*, *I am the fact of loving = I love*; (2) to the sole verb *Aā M°R-A*, *is my loving = I love*; (3) to the auxiliary and to the verb *Aā-a M°R-a*, *I am, I love = I love*. If you multiply those three forms by the number of the above-mentioned auxiliaries, *pā* being excepted; if you remember that in the course of time some verbs *XOP⁰R*, *to become*, *H'Ā*, *to stand*, *MĀK*, *to mind*, become auxiliaries too, you will conceive easily how it is that we find in the texts an almost incredible quantity of verbal locutions which are not distinct tenses, but distinct forms of one tense identical to the indefinite tense of which I have spoken already.

Thus, the great quantity of verbal forms and, for all that, the complete want of precise tenses and moods, are the two capital faults with which the Egyptian tongue had to grapple, and which it never succeeded in rejecting entirely. From the auxiliary *āN* [= *Nā*] derived the participle *N*, which, being placed between two words, denotes: (1) a state in which the idea expressed by the first word is assimilated to or made dependent of the idea expressed by the second: *ŪN-n-AMEN*, *The being WHICH IS Ammon*; *ŪN-n-A*, *The being WHICH IS me, Ammon's being, my being*; (2) the past tense *ŪN-n-A*, *I was*, *Z°D-n-AMEN*, *Said Ammon*. A past thus formed differs from the present, not in signifying a possession of the verb by the subject, since *M°R-A*, *I love*, implies also an idea of possession, but in marking the possession more strongly that the present marks it, *M°R-n-A*, *Loving WHICH IS mine*, insisting on the idea of possession more pointedly than *M°R-A*, *Loving o' mine*. Hence it is that the distinction between the two tenses is frequently overlooked, and that *M°R-n-A* signifies oftenest *loved*, yet often also *I love, or I will love*.* So between the auxiliary and the verb they intercalated prepositions which design the direction of the action *H'°R* towards the present and the past, **R* towards the future: *Aā-a H'°R M°R*, *I love, I loved*; *Aā-a-R M°R*, *I am to love, I will love*, although the **R* form is employed often for the past or the present. In the language of the Demotic texts, the *n*-past and the *H'°R*-conjugations fell out of use, and the conjugations with auxiliary verbs were almost always reserved to the expression of the past. In Coptic, the tense which results from the suffixion of personal pronouns to the root disappeared almost entirely: the auxiliary *ātā* and certain forms of the auxiliary *ātā* marked mainly the present, while other forms of the same were used mainly to mark the past. However, in Demotic and Coptic, as well as in the language of older times, we find the most perplexing indecision in the manner of rendering the relation of tense: the verbal forms showed a tendency towards a tense, but were not definite tenses.

* See Maspero, *Sur les Formes de la Conjugaison*, p. 8, sqq.

CHAPTER II.—*The Substantive.*—M. Brugsch has adopted with reason the views of M. Lepage-Renouf about the femininity of the nouns,* and considers the *t*-ending as a phonetic sign of the feminine. To M. Lepage-Renouf's testimony I am able to add a proof deduced from the analogy of the Coptic language. In Coptic, the feminine of the nouns is shown by an *-t* (*M.*) or *-t'* (*T.*) ending: *σov*, *brother*, *σowē*, *σowē*; *βwκ*, *servant*, *βwκt*. Now, the feminine pronoun of the second person, which is written in Egyptian *-T*, *-T'*, lost in Coptic its final *-t*, and became *-e*. I think the same process which deprived this pronoun of its *t* deprived the nouns of theirs; and that, as we must attribute to the feminine pronoun *-e* a prototype **T*, **T'*, so we may attribute to the feminine in *-t*, *-t'*, of the Coptic nouns an Egyptian prototype in **T*, **T'*: *σowē* = *SONT*; *βwκt* = *B^KOT*.

CHAPTER VIII.—*The Verb.*—“The Egyptian verb, in its conjugation, offers an active voice and a passive voice; the indicative, subjunctive, optative, imperative, participle, and infinitive moods.”† As we have just said, the Egyptian has no moods: the relations of the subjunctive, imperative, potential, infinitive, which we express by a special modification of the root, are indicated either by syntactical locutions, or by the adjunction to the verb of independent particles. So it is that M. Brugsch, after having affirmed that there are moods in Egyptian, is constrained by the facts to contradict his declaration. “The Egyptian speech and writing have no special forms to express the subjunctive mood, which latter is announced by particles placed before the various forms of the tenses.”‡ Speaking of the imperative, “The naked root of the verb without the addition of any sign whatever is employed oftenest to mark the presence of the categoric imperative.” The remaining forms of the imperative are composed by an addition of other precative or supplicative verbs, *MĀ*, *give*; *AR*, *do*; or the exclamation *A*, *oh!*§ The infinitive is “represented by the verbal root, without addition of any particular sign.”|| Thus the modality possesses no special and definite marks: it is expressed by various syntactical devices which have nothing common with the processes of what we call conjugation. It is the same as saying that there are no moods in Egyptian.

There is something really alarming in M. Brugsch's notion of thirty-two tenses for the Egyptian indicative. If he had divided the forms of the verb according to the principles I have mentioned above, he would have obtained only three types of conjugation: (1) by suffixing to the verbal root the subject, whatever it be, either noun or pronoun, or member of a phrase; (2) by preposing to it one or more auxiliaries; (3) by placing between the auxiliary and the verb a preposition which marks the direction of the action done or undergone by the subject. Most of the forms given by M. Brugsch, and many others in *M^K*, *H'Ā*, *XOP⁰R*, he has not given, would have been more naturally distributed in those three categories; perhaps he would have been induced by this division to take away several forms, the eleventh for instance, *ARī Pū ARī-N-EW*, which are not, properly speaking, verbal forms, but syntactical combinations, or the third, *AR-N-EW*, which is a mere phonetic variation of the second, *AR-AN-EW*.

According to M. Brugsch, the Coptic futures in *ε* and *νε* are derived from the verbs *EY*, *to go*, and *AN*, *to bear, to come*; so that *εīpeū*, *εīvapeū*, should be translated *I go, I come to love*, like the French *je vais aimer*. I would not insist upon this etymology but that it might, if allowed to pass, become a cause of great errors. The Coptic futures are not formed with the help of these two verbs: they are derived from

* Lepage-Renouf, “On Several Hieroglyphic Words,” in the *Zeitschrift für Ägyptische Sprache*, 1871, pp. 129–131.
† Brugsch, *Gram.* p. 29.

‡ Id. p. 51.

§ Id. pp. 53–55.

|| Id. p. 55.

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the forms of the Demotic futures in *n*, and **r*, the latter of which not extant in M. Brugsch's *Demotic Grammar*. I have found of late *īēpēi*, *īīapēi*, *I will love*; *ēkēpēi*, *ekvāpēi*, *thou will love*, are but the exact transcription of the Demotic futures: *Aū-A-*r-MEi*, *Aū-A-n-MEi*, *I am to love*; *Aū-R-*r-MEi*, *Aū-R-n-MEi*, *thou art to love*, &c.

Thus for the controverted points: as for the new principles M. Brugsch has hit upon, they are too numerous for me to enumerate in the space at my disposal. In this as in his other works, M. Brugsch has widened the old roads and opened new ones: it is for us who come after him to follow and outstrip him if we can.

G. MASPERO.

Intelligence.

The present season has been fruitful in works bearing on historical theology. A new book by Professor Schrader on *The Cuneiform Inscriptions and the Old Testament* (see under New Publications, "Philology") seeks to apply the best ascertained results of Assyrian and Babylonian researches to the illustration of the Old Testament writings. It is arranged in the convenient form of annotations on the several books, and, out of consideration for the uninitiated, gives the cuneiform proof-passages in Roman letters, with a translation and occasional notes. There is also a glossary, and excellent indices. The work aims at completeness, so far as the published Assyrian texts allow; but it should be remembered that we are but at the beginning of our discoveries. The author (a contributor to this journal) is the elected successor of Dr. Diestel at Jena.

Professor W. D. Whitney has collected his articles and essays in a volume, which will appear shortly under the title, *Oriental and Linguistic Studies*.

A catalogue is promised of the *Bibliotheca Bongarsiana*, the important collection of manuscripts formed in the sixteenth century by Peter Daniel and Jacob Bongars, and presented by them to the city of Berne, where it now is. It is to be edited with a preface by Professor H. Hagen, and will be accompanied by lithographed facsimiles, giving specimens especially of the dated manuscripts of different periods.

The Bibliotheca Palatina was transported to Rome from Heidelberg in the time of the Thirty Years' War, under the charge of a certain Leo Alacci. He wrote a full account of his journey to and from that place, and this document has recently been found in a village near Udine, and printed in the *Heidelberger Jahrbücher*.

Contents of the Journals.

Journal Asiatique, No. 69.—Sabean Inscriptions; by J. Halévy.—Observations on two recent works of M. Maspero; by Eug. Révillout. [Criticizes M. M.'s Coptic scholarship.]—Miscellaneous. On the words *Avesta* and *Zend*; by M. Oppert. [Rendered "law" and "prayer" respectively.]—Supplementary note to the memoir on the ancient history of Japan; by M. d'Hervey de Saint-Denys.—Nordtmann's *Textes classiques . . . des Israélites*; rev. by St.-Guyard.—No. 71.—The Sabean Inscriptions; translated by J. Halévy. ["Partielle et provisoire." A subsequent work will contain a detailed analysis of the texts. There are three appendices: 1. A comparative alphabet; 2. An examination of the statements of Herodotus respecting the religion of the Arabs; 3. On the inscription of 'Aṭṭar at Me'in.]—Miscellaneous. Pasargadae and Murghāb; by M. Oppert.—Interpretation of an inscription of Artaxerxes III. Mnemon found at Susa; by M. Oppert.—M. Janneau on the Cambodian language; rev. by M. Pauthier.

Zeitschrift für vergleichende Sprachforschung (vol. xxi. [new series, vol. i.] part 1).—This periodical, of which we need only say that it has grown in importance and popularity with the Science of Language itself, begins a new series with the beginning of its third decennium. The size of each number has been increased at the same time to ninety-six pages, and an index to the last ten volumes is promised. The contents of the present number are:—Contributions to Etymology; by A. Fick. [Lat. *nitere*, Old Germ. *gneist*; Lat. *adolere*, from a root *al-*, "to burn"; Eng. *dreg*; Gr. *olēda*, *olēos*; Lat. *meta*; Sanskr. and Celtic feminines of the numerals three and four; Lat. *caecius*; Lat. *quittus*; Gr. *τύναρα*, Lat. *exta*; Eng. *icicle*; Prussian and Lith. forms answering to Gr. *Φέξ = έξ*; Sanskr. *vrika*, "a plough," Lacon. *εβλάδα*, &c.]—On the Theory of the Accents; by F. Misteli. [Corrects a misunderstanding of the writer's views (in vols. xvii. and xix.) into which Mr. Whitney had fallen; and shows that Mr. Whitney's theory of the *svarita* is substantially the same as his own. Explains the accent of *μές*, *μές*, as arising from contraction of *με-ας*, *με-ης*, and confirms this from an Old Persian gen. in *-hyhyā*, as well as by some Gothic

forms.]—The new High German Aspirates and Tenues; by J. F. Kräuter. [An interesting analysis of the phonetic value of the mutes in German. It appears that in a large part of Germany the true *mediae* do not exist, *g*, *a*, *b* being sounded as the *tenues* of other languages, while *k*, *t*, *p* are *tenues aspiratae* (Sanskrit. *kh*, *th*, *ph*, Gr. *χ*, *θ*, *φ*), except in certain cases, viz. (1) before mutes, as *wirk*; (2) before surd spirants (*f*, *s*, &c.), as *Werks*; (3) after surd spirants, as *Spess*; (4) at the end of a word not followed by a pause; (5) between vowels of which the former is short and accented, as *Säcke*; (6) in the "Inlaut" after any accented vowel, as *welke*, *Seiten*. A parallel to the last exception is found in the silent *k* of words like *blähēn*, &c.; and many other illustrations are given from German dialects and from other languages. The physiological grounds of the chief phenomena are clearly pointed out, viz. the effort required to pronounce the sound *h*, and the slight degree of prominence which it has by comparison with most other letters. The difficulties of observation, created by the traditional spelling, may be recommended to the notice of those who imagine that a phonetic system would deprive us of a help in tracing etymologies. The article concludes by examining sounds usually but wrongly regarded as true *tenues*, in particular the mutes in the combinations *kn*, *km*, *tn*, *tm*, *pn*, *pm*.]—The German *tsch*; by G. Gerland. [A comparatively late formation, in the "Inlaut" and "Auslaut" from *tz*, and that again often from *kz*, in the "Auslaut," a dialectical strengthening of *s* or *sch*. It never arises, as in the Romance languages, from *k*.]—Reviews:—*Zur Geschichte des indo-germanischen Vocalismus*, by Joh. Schmidt; rev. by B. Delbrück. [Brilliant and convincing in the main; makes important use of the doctrine of a special kinship between the German and Slavonic groups of languages.]—*A Comparative Grammar of the Anglo-Saxon Language*, by Francis A. March; rev. by Moritz Heyne. [Much praised, especially the syntax.]—Lit. *kirmi*; by Joh. Schmidt.

Philologischer Anzeiger, iv. 8.—The new publications chiefly recommended are:—J. E. Ellendt: *Sammlung der Parallelstellen zum ersten Buch der Odyssee*. [A specimen of a complete "Parallel-Homer" left in manuscript by the author.]—Arnold Hug: *De arte critica in Antiphonis Orationibus facilanda*. [Supports the claims of the MS. Crippsianus A to be the safest guide.]—A. O. F. Lorenz: *Collationen des Codex vetus Camerarii* [B] und des *Codex Ursinianus* [D] zur Aulularia des Plautus. [Corrects Ritschl's estimate of J (the MS. of the British Museum), showing that it agrees closely with the other MSS. of the first eight plays; and, again, that D and J are akin as compared with B.]—O. Kreussler: *Observations in Ovidii Fastos*.—W. Oetling: *Librorum manuscr. qui Ciceronis Or. pro Flacco continent qualis sit conditio demonstratur*.—L. Pomtow: *Das Leben des Epaminondas*. [Reviewer complains of the want of sifting of the sources of Greek history.]—A. Philippi: *Symbolae ad doctrinam juris Attici de syagrapheis et de oibias notione*. [To show that more care is needed in applying Roman ideas, and in using the notices of grammarians and lexicographers.]—A. Müller: *Die Ausrüstung und Bewaffnung des römischen Heeres in der Kaiserzeit*. [In the form of a commentary on fourteen models made by E. du Bois.]

New Publications.

- BARHEBRAEUS. *Chronicon ecclesiasticum*. (Syriac and Latin, with Notes.) Ed. J. B. Abbeloos et T. J. Lamy. Tom. I. Louvain: Peeters.
- MARTIN, L'abbé. *Essai sur les deux principaux Dialectes araméens*. Paris: Maisonneuve.
- PENTATEUCHUS Samaritanus. Ed. H. Petermann. Fasc. I.: *Genesis*. Berlin: Möser.
- RTHI, Frz. *Die Textesquellen des Justinus*. Leipzig: Teubner.
- SCHIEFNER, A. *Ausführlicher Bericht über Baron P. v. Uslar's Awarische Studien*. St. Petersburg.
- SCHLEGEL, G. *Sinico-Aryaca, ou Recherches sur les racines primitives dans les langues chinoises et aryennes*. Batavia.
- SCHRADER, Eb. *Die Keilinschriften und das Alte Testament*. Nebst chronolog. Beilagen, einem Glossar, Register u. zwei (lith.) Karten. Giessen: Ricker.
- SCHRADER, Eb. *Die assyrisch-babylonischen Keilinschriften. Kritische Untersuchung der Grundlagen ihrer Entzifferung*. Nebst dem babyl. Texte der trilinguer Inschriften in Transcription, sammt Uebersetzung und Glossar. Leipzig: Brockhaus, in Comm.
- SYMMACHI, Q. Aurelii, *Relationes*. Recensuit Guil. Meyer. Leipzig: Teubner.
- TACITUS, Cornelius. *Dialogus de Oratoribus*. Für den Schulgebrauch erklärt von Georg Andresen. Leipzig: Teubner.

ERRATA IN No. 56.

- Page 345, col. 2, note fifth, for "Grundwig" read "Grundtvig."
for "provincial" read "poetical."
", 348, col. 1, *New Publications*, for "DANETT" read "DOMETT."

THE ACADEMY.

"INTER SILVAS ACADEMI QUARERE VERUM."

Vol III.—No. 58.

Readers are reminded that the mention of New Books, Articles, &c., in our lists is intended as a guarantee of their importance. The Editor of THE ACADEMY cannot undertake to return communications which are not asked for. The Editor cannot reply to questions from authors respecting the notice of their books. The next number will be published on Friday, November 1, and Advertisements should be sent in by October 28.

General Literature.

BUDDHIST FOLKLORE.

Ten Játakas; the original Pali Text, with a Translation and Notes. By V. Fausböll. Copenhagen: Hagerup. London: Trübner and Co.

In this little volume M. Fausböll has given us a new instalment of the Buddhist Játaka, consisting of ten consecutive stories taken from the second great division called the *Duka Nipáta*, and forming a valuable addition to our stock of knowledge of this remarkable collection of ancient tales. The first of the ten Játakas is entitled, "A Royal Admonition," and the story is briefly as follows. There was once a king of Benares named Brahmadatta, whose righteous administration of justice put an end to litigation in his kingdom, and left him time to turn his attention to his own faults, with a view to their correction. He accordingly questioned first his own retinue, then the public officials, then the citizens of Benares, then the suburban inhabitants, and lastly, mounting his chariot, he drove through the length and breadth of the land, begging all whom he met to tell him his faults. But all with one accord told him only of his virtues, and he was returning, baffled, from his expedition, when in a narrow defile his chariot met that of Mallika, king of Kosala, who was bound on a precisely similar mission. It at once became evident that one of the chariots must make way for the other, and the charioteers of the rival monarchs commenced a dispute for the precedence, which seemed hopeless when it was ascertained that neither could claim any advantage over the other in age, wealth, fame, or military power. At length, however, it was decided that the more virtuous should have the precedence, and the charioteer of king Mallika, challenged to describe the virtues of his royal master, replies as follows, "King Mallika overthrows the strong by strength, the mild by mildness, good he overcomes with good, and evil with evil." The other charioteer retorts, "If these are his virtues, what are his faults?" and thus sums up his own master's practice, "With meekness he conquers anger, he overcomes evil with good, he disarms avarice with liberality, and the liar with truth." These noble words have drawn from M. Fausböll a well-merited panegyric; he points out that the teaching they convey is absolutely identical with that of Jesus, and he adds, "The more I learn to know Buddha the more I admire him, and the sooner all mankind shall have been made acquainted with his doctrines the better it will be, for he is certainly one of the heroes of humanity"—a sentiment which most of those who have given Buddhism more than a passing

VOL. III.—NO. 58.

study will heartily echo. The story ends by saying that Mallika and his charioteer instantly alight and draw aside their chariot, and the good king Brahmadatta, who is Cákyamuni in an anterior existence, returns to his capital, after giving Mallika some wise admonition. In the second Játaka, the Bodhisattva is a lion who has six brothers and one sister. A jackal, the meanest of the animals, dares to lift his eyes to the young lioness and offer her marriage. Indignant at this affront put upon their family, the younger lions one after another rush hastily upon the jackal, who is snugly ensconced in the "Crystal Cave," and dash themselves to pieces upon the transparent adamant. But the Bodhisattva, warned by the fate of his brethren, noiselessly approaching the cave, sends forth a roar so terrific that the jackal's heart bursts with terror, and he dies a craven's death. The moral is, "Look before you leap," or, as the text says, "The hasty man is ruined by his own actions." The third is an amusing tale of a hog who fancies he has inspired a lion with fear, and challenges him to mortal combat. The lion fixes that day week for the duel, and the hog, scampering back to his herd, proudly declares that he is going to fight the lion. The announcement is received with terror, and the crestfallen hog takes the advice of his friends to roll in a dunghill before encountering his dreadful foe. Accordingly on the fateful day our hero presents himself before the lion armed in a panoply of filth, and the noble beast, scorning to touch so contemptible a foe, says, "If you want to fight, I leave you the victory." The story adds, with a dry humour, that the hog told his friends he had "conquered the lion!" I pass on to the fable of the lion and the jackal, which is the seventh of this series, and breathes the true spirit of Buddhism. A jackal having by his cunning extricated a lion from a position which threatened him with death, the two animals from that day became sworn friends. But after a time the lioness, jealous of the jackal's mate, did all she could to terrify her and her cubs, with a view to procuring the dismissal of the obnoxious family. The jackal went to the lion and humbly sued for permission to break off an intimacy which had become dangerous to him. But the lion, after enquiring into the circumstances of the dispute, nobly stood by his friend, and, rebuking his lioness with the words, "A steadfast friend, even if he be weak, is a relative and kinsman," for the first time told her the origin of his intimacy with a creature so low as a jackal. The story ends by saying that the two families lived happily together for seven generations. The *Suhanu Játaka* relates how two exceedingly vicious horses, being let loose upon each other, exhibited, to the amazement of all beholders, every sign of satisfaction, and began licking each other affectionately. The moral is, "Birds of a feather flock together," or, as the tale expresses it, "the vicious Suhanu makes friends with every plunging, rearing, biting horse; the wicked with the wicked, the sinner with the sinner." The ninth story is entitled, "The Peacock," and is of very high interest. Once upon a time the Bodhisattva was born as a golden peacock, "beautiful and graceful, and variegated between his wings with bands of exquisite colour." Taking his stand on a Himalayan mountain-top, the radiant bird salutes the rising sun with this "sublime hymn," which he has composed to ward off evil during the day:—

"Rises the all-seeing universal king, who shines upon the earth with golden ray:
Thee I revere, lord of the golden sheen; 'neath thy protection may we live this day."
"The saints whose knowledge doth all things transcend, theirs be my homage, may they me sustain;
Praise to the Buddhas, praise to their truth sublime, praise to the holy freed from error's chain."

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Again at sunset, gazing from his lofty post upon the vanishing orb, he breaks out into the song :—

" He sinks, the all-seeing universal king, the golden-hued who fills the earth with light :
Thee I revere, lord of the golden sheen ; 'neath thy protection may we rest this night."

" The saints whose knowledge doth all things transcend, theirs be my homage, may they me sustain ;
Praise to the Buddhas, praise to their truth sublime, praise to the holy freed from error's chain."

M. Fausböll has entirely altered the character of the second stanza of these invocations by taking *brāhmaṇa** in its ordinary sense of "a brahmin," and by rendering *buddhā* "the wise," and *bodhi* "wisdom." He justifies this course in the following words : " There are no grounds for interpreting the single words of this tale Buddhistically, nearly all the tales of the Játaka-book are old folklore in common for all India without regard to religion, and many of them treat evidently of pre-Buddhistic brahmanical affairs, and have been made Buddhistic in their application only." But this does not really meet the question, which is whether a non-Buddhist would make use of such expressions as *nam' atthu buddhánām*, *nam' atthu bodhiyā*. I think not; at any rate the subject is not one that can be summarily dismissed in a few lines : it is scarcely necessary to observe that the comment on the lines takes them in a strictly Buddhist sense. The story continues as follows. One night Khemá, the wife of Brahmadatta king of Benares, dreamt that she saw a golden peacock, and she entreated the king next morning to get the bird for her. A fowler was sent to snare the Bodhisattva, but owing to the efficacy of the charm repeated night and morning all his efforts were in vain, and at length the queen died without obtaining her wish. The king, bitterly complaining that the peacock had caused his wife's death, wrote on a gold plate the following inscription : " A golden peacock dwells in the Himalaya, whose flesh confers perpetual youth and immortality." The first five successors of Brahmadatta in turn read this inscription, and, eager to obtain eternal youth, sent fowlers to capture the wonderful bird, but in vain, the magic spell rendered all their snares unavailing. But at length the wiles of the fowler commissioned by the sixth king were successful, the peacock forgot to repeat his spell, and fell into the hands of the sportsman, who carried him in triumph to the king of Benares. The delighted monarch was rejoicing in the prospect of immortality when he received from the peacock a revelation which induced him to spare his captive's life. " I was once," says the Bodhisattva, " a universal monarch (cakravartin) in this city, and made all men obey the precepts of Buddhism. As the reward of my conduct I was re-born at my death in the Távatimsa heaven. But when I left that abode, owing to some misdeeds in a previous existence, I was re-born as a peacock,† but became golden-coloured as a reward for my piety while a universal monarch." The king rejoins, " You say your colour is owing to your having once been a pious cakravartin in this city, but how am I to believe this? have you a witness?" " I have," replies the Bodhisattva, " When I was king I travelled through the air in a jewelled chariot, and this chariot was buried in the royal pleasure tank, where you will find it." The king drains his pleasure tank, finds the chariot, becomes a convert to the Buddhist faith, and bestows royal honours on the peacock, who, after a brief sojourn, returns to his mountain home, with the parting injunction, " Make haste, great king, to work out your salvation." Such is the beautiful *Mora Játaka*, a tale which

appears to me thoroughly Buddhist from beginning to end.* M. Fausböll would be the first to admit that all except the peacock's invocation is Buddhistic, and his taking the invocation in a brahmanic sense involves the bold theory that the verses of some, at least, of the Játaka tales can be dissociated from the story which contains them. M. Fausböll has nowhere stated such a theory, and it is scarcely within the bounds of possibility that it should be a true one. In his preface M. Fausböll has justly observed that the " framework" or preamble of each tale is no doubt less ancient than the tale itself, but this in no way bears on the connection between the tale and the verses which it contains. The moral of the tenth story is, " Pride goes before a fall." Once upon a time a golden swan, who lived in the deva world and had two sons as beautiful as himself, formed a connection with a crow who lived in the kingdom of Videha, near the capital Mithilá, and their offspring was a mongrel bird, to whom they gave the name of Dapple. The young swans, having ascertained the cause of their father's frequent visits to the world of men, begged him to let them bring their low-born brother to their own celestial world. They received permission to do so, and, perching Dapple upon a stick, seized each an end, and soared into the air above the city of Mithilá. It so happened that king Videha was at that moment driving round the city in his state chariot, drawn by four snow-white Scinde horses, and the base-born Dapple no sooner caught sight of the royal equipage than he exclaimed, " Why, I am every bit as grand as king Videha ; he has a chariot with white horses, and I have a chariot with golden swans." Indignant at his presumption, the swans were at first about to let him fall to the ground, but relented and carried him to their father. The latter, hearing the story, sent his unworthy offspring back to earth with these scornful words, " You tread on dangerous ground, my son, this place is too good for you ; go back to your village and your mother's home." And the crestfallen bird ended his days on his native dunghill.

In an appendix M. Fausböll has given the Pali text, without a translation, of two tales taken from a different part of the Játaka-book. One of these has the same title as the first of the Ten Játakas. It relates how a king Brahmadatta, wandering about in search of some one who will tell him of his faults, comes into a part of the Himavanta fairy-land, in which everything he eats, even a banyan leaf, has a delicious taste. He is informed by a pious hermit (the Bodhisattva), who dwells there, that in this district everything tastes sweet to those who live virtuously, and bitter to those who live wickedly. To test the truth of this assertion, Brahmadatta goes back and rules unrighteously for a short while, after which he returns to Himavanta and finds the food bitter, as predicted. The hermit then recites some stanzas to the effect that as cattle in crossing a river follow their leader whether he goes straight or crookedly, so if a king goes wrong his people go wrong also, while if he rules well the people are happy. The king profits by the Bodhisattva's admonition, and returning to his kingdom reigns righteously ever afterwards. The remaining tale is called *Mahámora Játaka*, and up to a certain point follows the *Mora Játaka* pretty closely, but ends differently, the peacock, when captured, converting the fowler, who sets him free. It is worthy of note that this tale presupposes a knowledge of the *Mora Játaka*, of which, up to the capture of the peacock, it is little more than an amplification.

In editing these tales M. Fausböll has fully maintained the high standard of his *Five Játakas* and his *Dasaratha*

* I have elsewhere shown that *brāhmaṇa* in Pali is constantly used in the sense of an Arhat or Buddhist saint.

† The animal existence is one of the four states of punishment.

* The peacock's invocation forms part of the *Piriṭi Pota* (or "Book of Spells against Evil Spirits"), translated by Gogerly. Digitized by Google

Jātaka. The text is collated, and the variants are recorded, with a la'bourious care deserving of the highest praise, and the translation is scrupulously accurate throughout, indeed too accurate for elegance, the occasional use of the historical present, for instance, being a decided blot on an English version. I have noticed one or two slips, as at p. 80, where *pakkhdnam antare* is inadvertently rendered, "among the birds," and at p. 47, where *te me namo* is rendered, "those I worship": it should be either, "they are (the objects of) my homage," or, as the comment takes it, "may they receive my homage." I may observe that *namo* in Pali seldom or never means "worship" in our sense.

The twenty pages of notes contain much interesting matter, but might, I think, have been shortened with advantage.*

The appearance in rapid succession of the *Dasaratha Jātaka* and the *Ten Jātakas* is a pledge that M. Fausböll has returned to his labours in the field of Pali literature with all his old zest and energy; and we may hope that he will henceforth devote himself exclusively to the Buddhist folklore, a department which he has made so entirely his own. In concluding this notice of his latest work, I would venture to suggest that, instead of giving us from time to time detached fragments of the *Jātaka*-book, he should begin at the beginning and go regularly through it, issuing at stated intervals a volume containing either a certain number of tales or a certain number of pages. We should thus gradually get a clear idea of the book as a whole; and if the *Jātaka Niddna* was made the first volume of the series, we should know what the Buddhists themselves have to say concerning the origin of the tales. By omitting notes and appendices (which do not interest the general student of folklore), M. Fausböll would greatly expedite his labours; and at the rate of thirty or forty *Jātakas* a year, he might well hope to accomplish in his lifetime the task of editing the entire *Jātaka*, a task worthy of one who divides with the illustrious Burnouf the fame of having created Pali scholarship.

R. C. CHILDERS.

LITERARY NOTES.

In *Im Neuen Reich* (September 27) Dr. A. Dove, one of the *collaborateurs* in the Life of Humboldt recently published, sums up the results arrived at by his biographers. He took a serious interest in a variety of special studies, but before he had attained to real eminence in any one, he always left it for a fresh pursuit. His *Kosmos*, though a marvellous compilation, was only begun after his independent contributions to science had ceased. His reputation therefore was highest when he was doing least to deserve it, but if he is regarded as a representative of the scientific culture of his age, it will scarcely appear exaggerated.—In the same periodical, an article, "Blicke über Klostermauern," is chiefly remarkable as a picture of the comfortable worldliness of monastic life in the well-to-do orders in Germany.

We understand that a work on Dante, by Mr. J. A. Symonds, will shortly appear. It is intended to serve as an introduction to the study of Dante's poems as well as of his life.

The last of ten articles on "France and the French," by Karl Hillebrand (*Allgemeine Zeitung*, October 6), discusses the curious technical facility and *savoir-faire* which makes French mediocrity in literature and art more tolerable than the mediocrity of any other people. The writer traces it in part to the traditions of a high social cultivation, and touches on the opposite weak point of German literature by observing that Lessing, Göthe, and Schopenhauer are nearly the only German writers who were neither tutors nor professors.

A writer in the *Allgemeine Zeitung* (September 30) is reminded by the annexation of Alsace (including Saverne and the site of the furnace in which the godly knave Fridolin was *not* burnt) of some singular Welsh parallels to Schiller's *Der Gang nach dem Eisenhammer*. The lines—

"Dem lieben Gottes weich nicht aus,
Findest du ihn auf dem Weg!"

are all that remains in the ballad pointing to a phase of the legend in which the faithful servant owes his escape to the observance of three rather oracular precepts. This is fully developed in a Welsh version of uncertain age, but ancient origin, which illustrates the proverb, "Envy consumes itself." The writer quotes from the same collection the story of a "Half-man," explained in the same allegorical manner as "the force of habit," which becomes irresistible if not wrestled with at once. Of course the primitive popular tale is always older than moral interpretations of this kind, but the latter are commoner than is generally known, and their comparative antiquity is a curious problem in folklore.

"Norwegian poetry since 1814" is so little known in England that Mr. Gosse's short account (in *Fraser*) of the chief modern Norwegian poets will be read with interest, though it is difficult, without more numerous translations, to give a really distinct representation of the quality and strength of their several claims to poetical eminence.

A r t.

The Dream of Poliphilus. [Über den kunsthistorischen Werth der Hypnerotomachia Poliphili: ein Beitrag zur Geschichte der Kunsliteratur in der Renaissance. Von Albert Ilg.] Wien: Braumüller.

THERE is no book, I think it may be said advisedly, in which a whole phase of human culture is reflected so fully and vividly, and from so many sides, as in the romantic vision of the Dominican father Francesco Colonna. And yet the name of Francesco Colonna is a name next to unknown, and his book of *Poliphilus* a book unknown beyond a narrow circle of collectors and the curious, who prize it only for its engraved embellishments, a small portion of its vast real significance. The present author does indeed (as we shall see by and by) underrate the amount of attention which has been paid to his subject by previous writers. But he rates very justly, and as no one else before him had done, the amount of attention which is its due. In fastening on the book of the *Hypnerotomachia* as the most concentrated, most comprehensive and many-sided expression of the early Italian Renaissance in its myriad enthusiastic modes at once, Dr. Ilg has shown a true sympathy with the spirit of the time; and he has sketched out what might grow into a contribution of the first value towards its spiritual history. Dr. Ilg is editor of several parts, published and projected, of the admirable Vienna series of *Quellenschriften für Kunstgeschichte und Kunstechnik*. The piece before us was written as an essay for the degree of Doctor of Philosophy at Tübingen. Hence, upon some strictures presently to be made, it should be borne in mind that we are dealing with what professes to be no more than a sketch, and may accordingly be permitted in the shortcomings of a sketch, towards a subject of which the issues are without number.

In the year 1499 there came from the press of the elder Aldus at Venice a book in the vulgar tongue, bearing the following title in Latin: *Hypnerotomachia Poliphili, ubi humana omnia non nisi somnium esse docet atque obiter plurima scitu sane quam digna commemorat*. This title is arranged in an inverted cone, and followed by seven stars and a warning against piracy by any other printer within the Venetian dominions—one of the earliest declarations of copyright known. On the last page of the volume (234 pages folio) are the errata, and the printer's imprint, as follows:

* For some philological criticisms, see *infra*, "philology," p. 399.

Venetiis, mense decembris M.I.D in aedibus Aldi Manutii. The author's name is not expressly given. That the book had been composed by him thirty-two years before its publication, and at another place, is indicated by this subscription on the last page but one: *Tarvisiis cum decorissimis Poliae amore lorulis distincretur miscellus Poliphilus, M.CCCLXVII Calendis Maii.* Poliphilus means lover of Polia; the author means to tell us that he finished writing his book on the 1st of May in the year 1467, at Treviso, when he was enchain'd by the love of Polia in sweet and honourable bonds. And the tenor of his story is how once upon a time he thought himself enamoured of Polia in a morning dream, and how his dream led him, through strange adventures and ravishing sights and lessons in her company, to the very point of fruition, when sunrise broke upon his sleep, and the vision vanished away. The example of Dante has been in his mind. He represents himself as wandering in a wood in his dream, as drinking the waters of a brook, as terrified anon by a ravening monster, before whom he flees, presently to find himself within a world all enchantment and magnificence, with nymphs, as free and friendly as they are beautiful, to do him its honours. There he meets the lady of his love, at first without knowing her, and is by her accompanied, encouraged, and instructed in the meanings of all that he sees and admires. The love story is constantly subordinated or forgotten; the progress of events is clogged by an extraordinary profusion of descriptive details, that unite in a curious degree the most minute and fatiguing technical pedantry with the most enthusiastic and enjoying affection and poetical rapture. It is a more than childish facility of imagination, a more than Asiatic exuberance of gorgeous or mystic material imagery. And such a style!—a Lombard Italian larded with unheard-of forms which the writer has incorporated or invented from the Latin, Greek, and Hebrew. “*La mia abrodieta Polia,*” “*zacharissimamente,*” “*strophiosamente,*” “*enucleatamente,*” “*profuse lachrymule,*” “*mustulenti morsunculi,*” “*limatissimo eloquio,*” these are the kind of flowery vocables with which his pages teem. According to a childish fashion of the Renaissance in more than one of the Romance literatures, every other epithet has either the superlative or the diminutive Latin form, and every other substantive the Latin diminutive, for expressing adequately the marvellous and delightful nature of the things which they describe. The effect of this language is grotesque, pedantic, and puerile in the last degree; it is an Italian both barbarised and effeminated, and could not be read but for the extraordinary warmth and richness of the imagination by which the scenes described in it have been bodied forth. It is the style stigmatised in Italian literature as *Fidentian* (according to the burlesque of Camillo Scrofa, published not many years later under the name *Fidentio Glottochryso*). You get accustomed to it as you read, and find that you are in the company of one who possesses, and pours forth without stinting, all the jumbled and excited new knowledge of an age that has just struck the lost fountains of antiquity. It is the early Renaissance—drunk with antiquity: lifted up with the delights of marble and manuscript; a world rejoicing with the sense of new blood in its veins, new freedom for its thoughts, the lust of the eye and the pride of life made lawful and honourable again. You soon discover that you are reading an allegory, and that under the figure of Polia you are to understand the classic age, the antiquity of Greece and Rome; under the figure of the five nymphs, the five senses that conduct the lover of that antiquity with delight towards what he seeks. Poliphilus wooing Polia is the Renaissance wooing the past. And the passion of the age is by no means overstrained in that similitude. Indeed it is just the kind of similitude which

modern criticism, reflecting from a distance on the age's spirit, might have chosen to represent it under. The profound genuineness of the passion carries you, with a certain cordial amusement and sympathy, over even the most profuse and tedious pauses of its progress, the most lingering amplifications of antiquarian and artistic pedantry. The writer is a marvel of scholarship; he has Vitruvius and Pliny at his fingers' ends; half his book is taken up with technical descriptions of architecture, palaces, temples, mausoleums, baths, fountains, gardens, which he imagines and lays out with infinite detail according to the divine precepts of the ancients as he has understood them. He devises monuments, tombs, and urns, with funerary inscriptions in a sentimentalised Ciceronian, good enough to pass with some later scholars for original. He has an idea of his own as to what the hieroglyphs must have been, and describes a quantity of relief carvings, having the nature of a modern rebus, which he conceives to correspond to that word. He is full of connoisseurship about ancient gems and intaglios. He is steeped in classical fable and history, and cannot breathe a sigh to his mistress without sending after it a dozen learned reminiscences of ancient heroes in predicaments parallel to his own. He invents pageants and triumphs without end, and describes them with rapture—pageants, triumphs in the spirit of Mantegna, Priapic festivals, and sacrifices to Venus. And beside his knowledge and passion for art and the antique, he has a parallel passion for nature and what one ought to call science: he makes the most immense and affectionate exhibition of botany and herbal knowledge according to the lights of his day.

And all this, which makes of the text of his book so romantic and fantastic an encyclopaedia of his age, its eager acquisitions and aspirations, is illustrated with one hundred and seventy-two woodcuts—the prize of the collector and the curious—which are as interesting for the history of the art as they are beautiful in themselves. They are pure, almost bald, outline designs, some in illustration of the architectural and antiquarian imaginations of the book, some of its figure incidents, the adventures, pageants, spectacles, and love passages. And these latter are without their like in the history of woodcutting. They breathe the spirit of that delightful moment when the utmost of imaginative *naïveté* is combined with all that is needed of artistic accomplishment; and in their simplicity are, in the best instances, of a noble composition, a masculine firmness, a delicate vigour and grave tenderness in the midst of luxurious or even licentious fancy, which cannot be too much admired. They have that union of force and energy with a sober sweetness, beneath a last vestige of the primitive, which in the northern schools of Italy betokens the concurrent influence of the school of Mantegna and the school of Bellini.

Who is the learned linguist, architect, botanist, antiquarian, poet, the anonymous author of this wonderful and wonderfully embellished composition? The anonymousness is thin after all; for, in his riddling way, the author has revealed himself by the initial letters of his thirty-eight chapters. Put these together, and they read: *Poliam Frater Franciscus Columna peramavit.* Brother Francesco Colonna accordingly is the name of one who by this work comes down to us as one of the most variously gifted, one of the most poetical and encyclopaedic, of all the illustrious group of the early humanists in Italy. And yet his personage is by far the most obscure among them all. All that the learned Prosper Marchand, writing in the first half of the last century, could learn about him from the chroniclers of the Dominican order, was that he was a brother of that order, born at Venice, resident part of his life at Treviso, the author of a famous work of literature in the mother tongue,

and by and by buried at Venice in the Church of SS. Giovanni e Paolo. The later researches of Federici, as quoted by Marchese, prove him to have been born in 1433, to have already belonged to the Predicants so soon as 1455, to have resided at Treviso up till 1472 (and there, as we have seen, to have composed the *Hypnerotomachia* by his thirty-fourth year) : to have professed rhetoric and languages at Treviso, and theology, subsequently to 1473, at Padua ; to have been at Venice on a mission from his order in Padua in 1483 ; again, after a long gap, to have been in receipt of relief in food and fuel, on account of age and infirmity, from the convent of SS. Giovanni e Paolo ; and finally to have died at that convent in the ninety-fourth year of his age, October 2nd, 1527. It has been inferred, rather than proved, that he must in his youth have been a great traveller in order to acquire the precocious mass of knowledge which places him in the front rank of the investigating students of his time, and which would have done honour to a Poggio or a Cyriaco. There is evidence of friendship between him and Ermolao Barbaro.

Another doubtful point is whether he really celebrates any earthly love under the allegoric figure of Polia. The early commentators unhesitatingly assumed that his heroine was a lady of Treviso, and called her, according to indications which they found in the text of the book, a Lelia Mauro, or a Lucrezia or Ippolita de' Poli. Later ones, and principally Father Marchese, whom Dr. Ilg follows, believe that there was no such lady, and that Polia is a personification only—as it were the Greek τολεία, the adorable and venerated antiquity. I think the opinion of Lamonnaye the more probable, according to which an abstract passion for antiquity and a concrete passion for a mortal lady would both be typified and blended together in the heroine. We have seen how Colonna has his eye upon Dante ; and as Beatrice was for Dante a mortal lady sublimated into the Heavenly Wisdom and identified with it, so would Polia be for Colonna a mortal lady sublimated into and identified with the Antique Learning, the new wisdom and new spiritual passion of his time. The human nature of Italy and its fashion alike would make the fact of an earthly passion antecedently probable, even in a brother of the order of Dominic. If there were no such real passion in question, I cannot see any meaning in Polia's long description of herself at the beginning of the second book, pointing explicitly to a Christian name *Lucretia*, and to a family of Trevisan fame supposed to be descended from the Laelia gens ; neither, if such a lady had not lived and died, could I see any sense in the epitaph to her which closes the second edition of the book.

The history of the *Hypnerotomachia* and its editions and fortunes is curious. The first edition had been put into the hands of the printer Aldus, not, as we see, by the author himself, but in his lifetime by Leonardo Crasso (a forgotten jurist of Verona) long after it had been composed ; and it contains a preface to that effect. The second Italian edition was published, with corrections of errata and one or two other slight changes, by the younger Aldi in 1545. The next year a French translation appeared, printed by Kerven in Paris for Jan Martin, secretary of the Cardinal de Lenoncour, who wrote a preface to it explaining how the translation, or free imitation rather, had been put into his hands by a friend. Here the affectations of the Italian style are pointed out and corrected ; and the result is a fine specimen of sixteenth-century French prose. In 1554 another issue of this was called for ; another in 1561, to which one Jacques Gohori wrote a preface, stating that the original French translator had been a knight of Malta, and he, Gohori, the friend who had put it into the hands of Martin. At the same time

Gohori gave a hint of its containing mysteries of price for the alchemist. This opinion grew, together with the superstitious respect founded upon it ; the book, besides its enormous popularity as a romance and encyclopaedia of classic learning, got in France the fame of a treasure-house of hermetic science besides. Its next French editor (1600) was Beroald de Verville, a deep alchemist and Paracelsian, who made some trifling alterations in the text and the wording of the acrostich, and hinted ineffable things about the philosopher's stone being there for such as knew how to find it. Many students now take its fabricated inscriptions for genuine ; but Isaac Casaubon, and one or two such heads, smile and say *they* are not to be taken in by "suaviludius ille" on this point. These French editions (I have not seen that of Beroald, and speak of the earlier) were adorned with engravings cut on wood by a native artist in imitation of the Italian. These, too, are excellent in their manner, so excellent as to have been attributed by modern criticism, without quite sufficient reason so far as I am aware, to either Jehan Cousin or Jehan Goujon, the great painter and great sculptor of the latter Valois reigns. Nothing is more interesting than to compare the designs one by one ; the French artist takes the motive of the original faithfully enough, but transforms it according to his own spirit, puts in more motion and agitation, less grave grace and simplicity, a freer cast of draperies, a less disciplined drawing, a more elaborate and less simple—but in its way very admirable and powerful—mode of treating landscapes and flowers. About the same time an English version was published by S. Waterson. Then the popularity of the work dies out, and the notices of it get vague and muddled. It has got about that the designs are by Raphael forsooth. That mistake serves the value of the book, and is used in sale and library catalogues ; it has been repeated into later times by Papillon. The author's name is even partly forgotten, in spite of the transparent nature of the acrostich in which it is conveyed. From Rabelais to Bayle, casual notices of *The Poliphilus* occur in French writers ; but after Balzac and sound taste its contents have come to be solemnly denounced as "in the highest degree irregular," or more briefly to be dubbed *galimatias* ; and there is a passage in which the great Despréaux is supposed to ridicule the style. Ménage has an allusion to the volume, and Lamonnaye, in his addenda to the Amsterdam edition of the *Menagiana* (1726), collects a quantity of information relative to it, and starts the theory which I have quoted, of Polia being at the same time a real lady of flesh and blood, and an abstract ideal of the antiquarian mind. The Italian engineer and architectural writer Temanza, and the French Félibien, both discuss at length, in the early part of the eighteenth century, the attainments of the author in Vitruvius and in architecture generally. The posthumous *Dictionary* of Prosper Marchand (1758) contains a formidable mass of citations and authorities in connection with the work. In subsequent histories of literature, Colonna is slightly mentioned by Tiraboschi and Guinguéné. And finally, many readers are probably acquainted with the pleasant little romance (*François Colonna*) into which Charles Nodier turned the somewhat slender knowledge and ample fancy which he possessed on the subject ; as well as with M. Michelet's forcible allusions to *The Poliphilus* (in his twelfth volume) as the favourite and typical literary food of that France of the Renaissance into which the versions of it were published.

There are obviously a vast number of aspects in which this singular book has to be regarded by a writer undertaking to examine it as Dr. Ilg has done. First and most important, there is its general relation to the culture and ideas of its time. For that Dr. Ilg is admirable. His opening section on the peculiar character assumed by the Renaissance

in Venice, the different form which the humanistic impulse took there and, for example, in Florence, are full of instruction. Again, his ample general knowledge of technical art literature and its sources in the Renaissance age give the utmost weight to what he says of the importance of the *Hypnerotomachia* from this point of view—if its artistic could be segregated from its romance portions—and of its relative place beside the treatises of Alberti, Serlio, Lionardo, Piero della Francesca, and the other great humanists, classicists, geometers, encyclopaedic students of antiquity and of nature, pioneers of the modern humanity. In the course of this section Dr. Ilg has frequent sentences, which we regret that space makes it impossible to quote, touching his subject with a tact of appreciation which, over and above the remarkable force and grace of his style, mark him out for a writer of whom we may expect the utmost in the fields which he has chosen.

Then there is the side of the romantic contents and narrative movement of the *Hypnerotomachia*, and these Dr. Ilg has set forth with great industry and spirit. He has travelled conscientiously through the book, and gives us a *précis* of each chapter, with a discriminating enlargement on all the more significant and characteristic episodes.

There is the side of its literary and linguistic interest, and on this Dr. Ilg is silent. He does not follow Tiraboschi and the other authorities into any discussion of the "Fidentian" or pedantesque style, which was adopted by some of the humanists who did not, like most of them, eschew the mother tongue altogether, and of which this is so memorable an example. But he has a conjecture of his own, which bears on the question of style. He points to the dedication of Poliphilus to Polia at the beginning of the book, in which Poliphilus says that he had for Polia's sake, and at her instance, abandoned *il principiato stile*, and translated (*traducto*) his work into its present form. Dr. Ilg is wrong in saying that he is the first to have noticed this point in the dedication. It was noticed by Lamonnaye, and understood by him, and by others after him, as meaning that Colonna had begun his work in the ordinary Italian vernacular, but afterwards, perhaps owing to pedantical tastes in the mortal Polia, changed it into the larded or Fidentian style. Dr. Ilg, on the other hand, remembering the rumour current among the older commentators of an original Latin version, supposes the work to have been composed, although never published, in Latin at the first date, 1467, and that then, for the sake of a more extended popularity (and thus, as it were, for the glory and at the instance of Polia herself), the author transferred or translated it into its present form for publication. That, I think, is acute, and would account for the kind of fundamental and quintessential Latinism which, in spite of Grecian and Chaldaic admixtures, is the note of the style, better than it can be accounted for by the hypothesis of unaided pedantry.

Then there is a whole fountain of interest in the comparison both of figure and ornamental subjects in the French and Italian editions—the comparison of human ideals and architectural ideals (for both artists treat the text with considerable freedom) in the Venice of the closing *quattrocento* and in the Paris of the latter Valois, half a century off. On this our author has nothing to say, being personally unacquainted, as we may gather, with the French editions.

There is also the side of bibliography and literary history : and here Dr. Ilg is rather weak. He says the number of writers who have mentioned the book is very small, and includes only Apostolo Zeno, in his *Life of the Aldi*; Leander, in his *Writers of the Preaching Orders*; Federici, in his *Memorials of Treviso*; Marchese, in his *Lives of the Dominican*

Artists; Cicognara, Selvatico, d'Agincourt, Zahn, Papillon, Passavant, and Nagler—generally, says he, with only a few words each. The very imperfect sketch we have ourselves run through above will show that, besides Félibien, Dr. Ilg here passes over the two capital and particular authorities, Lamonnaye and Marchand. And this leads him into a further error. He speaks of a few secondary Italian commentators in the seventeenth century as ignorant of their author's name, and then says that the truth was first found out, and the acrostich solved, by P. Pedrogalli and Apostolo Zeno. This comes of blindly following Marchese. I have not been able to refer to Apostolo Zeno's *Lives of the Aldi*, in which it seems he relates his discovery; neither do I know if the date of his solution can be earlier than Villani and Aprosio's *Discorso della Poesia Giocosa*, quoted by Marchand as explicitly giving the key to the riddle. But here is a chain of evidence to show that the key was held by some from the beginning, and in France at least can never have been lost. In the first place, the frequent half punning insistence upon the words *columna* and *column* in the original text points to a very meagre desire in the author to keep his secret at all. In the next, Marchand quotes from the *Giornale dei Letterati d'Italia* the description of a copy of the first edition, in private possession, bearing on the title a MS. note dated 1512 and naming Francesco Colonna as the author. And I am able to add a curious inedited testimony of a similar kind. The Cambridge University Library possesses a copy of the first edition, on the title of which is written an eulogistic sonnet of unmistakable genuineness, in *versi sdruciolati*, as follows :—

"Libro degno di cedro et di memoria,
Bello, dotto, gentil, ampio, decorulo,
Disceso dallo Dio del sacro chorulo,
Del Pegaseo liquor trionfo et gloria ;
In te chiudi ogn̄ fabula ogni historia,
Architetture da divin lavorulo,
Hieroliphici, gem̄o, argento, et orulo,
Et dal fanciul cupidio ogni vittoria.

"Francesco di virtu serma coloñula
T̄i scrisse in stil latin, greco, et hebraico,
Lodando Muse, Apollo, et ogni gratia.
Sin ch̄e Febo et la candida Latonula
Il cielo illustreran, serai duratico.
Va dunq̄ in man d'ognun cō buona audacia
Et li bei spirti facia
Del soavo scritto tuo, tuo vago flosculo,
Ch' assai più odora del fragrante mosculo."

This is signed by one of the house of Medici, as it seems—*Sixtus medices*—in the sixteenth year of his age, *anno dñi* 1518 : and the writer with his mincing diminutives shows himself an apt pupil of his master. (The second line printed in italics suggests questions into which one cannot enter here ; but it points probably rather to the semi-macaronic constitution of Colonna's language than to separate versions, which it is impossible to conceive, written by him in all three learned languages.) So that a countryman of the author's names him during his own lifetime in 1512, another in 1518. Then a Frenchman, Benoit de Court, names him in a Lyons book of 1533 ; then Jan Martin, in his preface to the translation of 1546, directly and elaborately gives his readers the acrostichal key, the system of initial letters having been carefully observed on purpose by the French paraphrast. So that it is misleading to talk of the mystery ever having been really complete or needed rediscovery.

Once more, the question of the artistic spirit and authorship of the designs is a most tempting and extensive one. Dr. Ilg is fairly satisfactory about this. He catalogues and describes the illustrations intelligently, one by one, and then makes suggestions as to their possible attribution. He rightly points to two hands (as indeed there may be more)

of unequal skill as being apparent in the work ; and finally fixes hypothetically on Bartolommeo and Benedetto Montagna. He is no doubt accurate in seeing here that blending of the solemn and tender Bellinesque and the robust and scientific Mantegnesque spirits which you find, and which is so delightful, in the secondary Lombard artists of the closing *quattrocento*, and especially in the Vicentine school — a Buonconsiglio, a Bartolommeo Montagna. But I should say it is more than doubtful if criticism in the matter will ever be able to go nearer than this. And Dr. Ilg ignores what seems to have been conclusively proved by Messrs. Crowe-Cavalcaselle : that Benedetto was not the brother of Bartolommeo Montagna, as had been supposed, but his son, whose career could not have begun at all till twenty years after the publication of the *Hypnerotomachia*. Again, our author writes of Squarcione, and the Paduan school of Squarcione, in a way that would have been more appropriate before the latest criticism had attenuated that name to little more than mythical proportions.

It will be seen, thus, that Dr. Ilg's spirited and elegant monograph has one or two shortcomings of a kind that are not quite to be permitted to it as being a sketch and no more. He has been led into one or two positive errors by want of acquaintance with French editions and French authorities, and one or two minor critical laxities besides. But these are in the least important sections of his work. Its most important sections, those that deal with the essential significance of his subject, spiritual and artistic, and with the elements amidst which it has its place, are all that can possibly be desired. And no one could better follow up than our author himself the task which he has here sketched out in relation to this fantastic, this colossal and pathetic memorial of learning happy in its blunders, of curiosity unembarrassed in its conjectures, of enthusiasm with its buoyant imagination and luxurious pictures—the memorial, and in part the parody, of an exuberant and unexhausted hour which we have learnt to envy in laughing, and to love even while we yawn.

SIDNEY COLVIN.

ART NOTES.

Dr. Dove writes in the present number of *Im Neuen Reich* a paper in remembrance of Edward Magnus, whose death was recently announced in these pages (see *Academy*, vol. iii. p. 327). The paper in question ultimately resolves itself into a brief review of Magnus' last contribution to art literature, *Die Polychromie vom künstlerischen Standpunkte*. It is agreed by all that the unspotted freshness of a new material, be it what it may, is unpleasant to the eye. We all desire something of a patina. The patina bestowed by the hand of time on marble or bronze is seldom quite what we want, and we recur to the hope of discovering some means by which we may produce from the beginning a thoroughly satisfactory patina, softening, heightening, or enforcing those portions only which require such additional touches. Magnus recapitulates in his pamphlet the not unsuccessful attempts made by modern artists to bestow the desired surface on bronze ; as to marble, he is obliged to confess that the secret which he believes the Greeks to have possessed still remains a secret in their hands. The much debated *circumlitio* of Pliny, "Hic est Nikias de quo dicebat Praxiteles interrogatus, quae maxime opera sua probaret in marmoribus : quibus Nikias manum admovisset ; tantum circumlitioni eius tribuebat" (35, 11, 134), was, Dr. Magnus ingeniously suggests, a carefully overlaid artificial patina, such as might be achieved by treating faults in the marble with rosin, &c., and at the same time adding a delicate and subdued tinting of details, borders on drapery, hair, and the like. In the palmy days of Greek art these modest limits were never overstepped, but as taste became corrupted, and Oriental influence made itself felt after the time of Alexander, Dr. Magnus thinks that variegated colour, what may be called

the waxwork style, which the people's art had in truth never renounced, again got the upper hand. Dr. Magnus concludes his essay with a word or two on the less complex question of colour as a means of architectural decoration. He is strongly of opinion that on the outside of a building it should never go beyond the variety afforded by the natural colours of the stones, marbles, &c. employed.

The Bishop of Augsburg is restoring the St. Ulrich's Church, which is one of the most important buildings in the town. The church derives peculiar interest from the fact that it is a very beautiful example of late Gothic, at the moment when late Gothic was developing into early Renaissance. The fittings of the interior are indeed all but pure Renaissance. The ordinary course of the modern restorer would be to remove these at once, as being out of keeping with the rest of the edifice. But the works at Augsburg seem to be conducted with the discretion which accompanies thorough knowledge. The restorers of the St. Ulrich's Church are not unmindful of the fact that the so-called industrial art of any given epoch is always in advance by some years of the style prevailing in those great main branches the study of which demands the acquisition of sound scientific knowledge. It is in the minor and more facile departments of internal fittings, furniture, and decorations that we must look for those germs of change which appear as pioneers breaking the way before the coming of a great new style. The fittings of the St. Ulrich's Church are therefore to remain in their places, and even the repainting and gilding is to be kept within modest limits. The high altar, which has been happily called a translation from the late Gothic into the Renaissance tongue, seems to have been originally somewhat over-gilt ; this defect has now disappeared through the action of time, and great care will be taken not to reproduce it. The fine ironwork which was formerly thrust into an unobserved portion of the building is to be brought into a suitable and prominent position ; and it is proposed to fill the empty windows with stained glass. St. Ulrich's, in short, will now reassume its rightful place, and take rank, after the cathedral, as the second great monument produced by Augsburg in the blossom-moment of the Renaissance.

Kaulbach's "Todtentanz," begun many years ago, is at last given to the public. In one portion figures Pio Nono, who, as the champion of Infallibility, triumphantly holds aloft the keys of St. Peter with which he has locked the doors behind him. In spite of all precautions, Death enters in the guise of a Garibaldian with the red cap on his head. In like manner throughout, the old motive is made to carry allusions to all the special questions of the day. The work is published by Hanfstaengl at Munich.

Dr. Helbig writes from Rome to the *Zeitschrift für bildende Kunst* a letter which contains an account of some recent purchases made in that city by the direction of the Berlin Museum. In the first place comes a head of Marsyas in Greek marble, found about five years ago in the excavations at the baths of Caracalla undertaken under the auspices of the Papal government. Besides this, a fragment of a relief, also executed in Greek marble, has been obtained, which came to light when the pavement of the Piazza di Pescheria was taken up last February. The third object is a portrait head of a Roman patrician found near Palestrina, some two metres below a mosaic pavement. In addition to these sculptures, two fine vases, the product of the excavations carried on at Cervetri by the brothers Bocca, and last, but not least, a bowl signed Duris : the figures are in red, and those on the outside represent a school ; each branch of learning has its group of learners standing before a seated teacher ; on the other side a youth teaches the flute, but the significance of the next set of figures is doubtful ; we have again a youthful teacher, but whether he teaches writing or drawing, Dr. Helbig (who however inclines to suppose drawing) will not undertake positively to decide.

Dr. Julius Meyer, the author of *Die Geschichte der modernen französischen Malerei* and editor of the *Allgemeines Künstler-Lexikon*, has been named director of the picture galleries of the Royal Museum at Berlin. Dr. Meyer, who has hitherto resided at Munich, has not achieved a reputation for that urbanity of

manner which the public generally desiderates in official personages. It is indeed possible that Dr. Meyer has but occasionally given evidence of that just resentment which all workers feel when called upon to sacrifice their time in amusing the vacuity of those who have nothing to do. At any rate in point of knowledge and insight we may feel assured that this post, vacant since the death of Dr. Waagen, will now be worthily filled.

A course of lectures has been announced for the coming winter, which are to be given in the hall of the Austrian Museum for Art and Industry at Vienna. Amongst the names of intending lecturers we observe those of Professor Conze, "On Expression in Ancient Art," Dr. Thausing, "On the German Art Movement of the Sixteenth Century;" Regierungs-rath Falke, "On Benvenuto Cellini and the Goldsmith's Work of the Renaissance;" Custos Lippmann, "On the History of Engraving"; &c.

There have been one or two reports of late of attempts made to injure the paintings exhibited in certain German picture galleries by cutting them with a sharp instrument or otherwise disfiguring them. In one instance at least (that of Rössler's picture in the gallery at Wiesbaden) religious fanaticism seems to have instigated the mischief. We now learn that three paintings in the Berlin Museum have suffered the most serious and disgraceful injuries, i.e. "Bathsheba Bathing," by Cornelius von Haarlem, on canvas (Cat. No. 734); "Portrait of an Old Woman," by Gerhard Dow, on wood (Cat. No. 847)—in this instance the slash goes right across the face; finally, "Perseus and Andromeda," a well-known masterpiece of Rubens, on wood (Cat. No. 785), has been cruelly gashed, a deep cut going right across the lightest portion of the flesh painting in the figure of Andromeda. It is a surprising fact that such an act could have been dared and have escaped remark at the present time when the museum is constantly thronged with visitors.

The *Gazette des Beaux-Arts* for October contains "Eros, a Study on the Symbolism of Desire" (first article), by Louis Ménard. The writer suggests that Hermaphrodite, the symbol of the union of the two sexes in nature, was intended to represent, under a plastic form, the same function elevated by marriage to the dignity of a social law. In the most perfect and beautiful example of the type, the Hermaphrodite of the Berlin Museum, M. Ménard thinks it impossible to see anything but a personification of Hymen; the head is covered with the veil, the emblem of marriage, and the action of the hand suggests the torch.—M. René Ménard concludes his account of the South Kensington Museum: "The first impression of the visitor is that of wild confusion; thought is impossible in the midst of this mixture of all things, and the mind is wholly prevented from fixing itself on any point whatever."—M. Emile Galichon has a notice of "Les Estampes des petits Maîtres."—M. Henry Havard continues his lively notice of the gems of Dutch art exhibited at Amsterdam in 1872.—M. Eugène Muntz concludes his notice of London Exhibitions. In running the eye over the cuts of modern English jewellery which accompany the article, it is curious to observe how, with one or two exceptions, the beauties of every ornament are nullified by some little sin of omission or commission; some ends unseen, which are wanted to explain the whole; some knot untied where firm hitch is necessary; or some solid rod inserted where a slight chain only is required. The one or two exceptions come from the workshops of Howell and James; and the text explains the mystery by informing us that this firm has called to its aid no other than Mr. Leighton, whose eye for patterning spaces is marvellously quick and refined.—M. F. de Tal reviews M. Tancrede Abraham's etchings from Château Gontier and its environs.—M. Saint-Cyr de Rayssac, in a paper on the Lyons Exhibition, reclaims against the brutal idea, which emanated from England, of mixing up pictures and other works of art with the products of manufacturing industry in one heterogeneous pell-mell.—The number closes with a portion of M. Houdog's essay on "The Church of Brou and the Artists of the Renaissance in Flanders." The reproduction of an engraving of Hans-Sebald Beham, from a silver plaque in the collection of M. Adolphe Bouillat, is deserving of special attention.

New Publications.

BIBLIOTHEK ORIENTALISCHER MÄRCHEN UND ERZÄHLUNGEN in deutscher Bearbeitung, mit Einleitung, Anmerkungen und Nachweisen v. Hermann Oesterley. I. Bändchen: Baital Pachisi oder die 25 Erzählungen eines Dämon. Leipzig: Fleischer.

DE MORGAN, A. A Budget of Paradoxes; reprinted with the Author's Additions from the *Athenaeum*. Longmans.

FROEHNER, W. Le Crocodile de Nîmes. Paris: Baur et Détaille.

Philosophy and Physical Science.

JÖDL on the Life and Philosophy of David Hume. [Leben und Philosophie David Hume's. Dargestellt von Dr. Friedrich Jödl.]

THE plan of Dr. Jödl's prize-essay on Hume appears somewhat narrow and timid: but its execution is certainly meritorious. The criticisms which he offers of Hume's positions are slight and fragmentary: he modestly declares it to have been beyond his powers to undertake a thorough philosophical estimate of the system or a complete exhibition of its historical relations. But his exposition of Hume's doctrines is not only always clear and accurate, but often skilful and discriminating, where some little skill and discrimination were requisite to combine properly the results of several compositions, divergent in plan and published at different times. Especially careful and judicious is his account of Hume's religious opinions. With regard to these there is some difficulty in arriving at a definite conclusion. It is certain that he was not, as is often represented, an Atheist: and there seems no reason to doubt the sincerity of his affirmation (*Nat. Hist. of Relig.* § xv.) that "any one of good understanding must adopt the idea of some intelligent cause or author of the Universe," nor of the similar statements in the *Dialogues* published after his death. It is true that in this latter treatise he develops, with unsurpassed force and subtlety, the speculative difficulties involved in the adoption of Theistic conceptions: but he does not sum up in favour of atheism, or even suspense of judgment as regards the simple immediate inference from the ordered universe to an Ordering Mind. The avowed scope of his scepticism seems limited to showing that this inference of Natural Religion cannot be made sufficiently cogent and definite to afford a basis for Rational Theology: and if the negative argument has more effect than the positive, as he presents them, it is still quite in the spirit of Hume's later philosophy to give the victory nevertheless to common sense and ineradicable instinct. That atheism has been popularly attributed to him, is probably due to the affected concealment of view in his famous essays on Miracles and Providence. The frigid irony with which he excepts the "inspired penmen" from his theory of testimony, and proposes an alliance between the sceptical reason and "Faith," naturally led his readers to regard the statement "that the whole frame of Nature bespeaks an intelligent author" as merely a pinch of incense on the altar of orthodoxy. In truth Hume and his friends seem to have curiously miscalculated the respective effects of different modes of expression of his unpalatable opinions. The *Dialogues* which he suppressed during his life, and which his literary executor regarded as a most unwelcome legacy, would really offend even orthodox readers less than the essays which he thought fit to publish. In these latter the irony merely envenoms the strokes of argument: but in the *Dialogues* there is a strain of earnest sincerity which all must feel, and a reverence for truth and sense of mystery which were perhaps the best substitutes for piety and awe that a mind like Hume's could give.

In treating of Hume's system of philosophy, it is funda-

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mentally important to determine the mutual relation of the two editions of it which he offered at different times to the public. Dr. Jödl considers the *Treatise on Human Nature* on the one hand, and the two *Inquiries* on the other, as substantially identical, and dovetails them together not unskillfully in his exposition. But without saying that this procedure involves any serious misrepresentation, I still think that a study of Hume should include a careful observation and explanation of the changes which Dr. Jödl overlooks: especially since the extent and nature of these changes are so different in different portions of the system. In recasting his metaphysics, Hume's aim seems to have been to suppress or throw into shade the more unpopular parts of his speculations. As these were generally just the most subtle and profound parts, the result is that the *Inquiry into the Human Understanding* is as inferior in substance to the earlier work as it is superior in style. The resolution of the Ego into a heap of perceptions is omitted: the sensationalist theory of Time, Space, and the objects of geometry, is merely hinted in a brief, sceptical suggestion of difficulties involved in current mathematical conceptions: and the critical comparison of the vulgar and philosophical views of the external world loses much in force and completeness. Hence no one really interested in Hume's metaphysics can consent to comply with his request that the later treatise "should alone be regarded as containing his philosophical sentiments and principles." The case is otherwise with the ethical *Inquiry*, which Hume justly looked on as his masterpiece. Here all the changes appear improvements. Not only are the different discussions better proportioned and compacted to produce conviction as to the general thesis that Utility is the essential object of moral approbation: but in the important chapter in which he discusses the titles to property recognised by positive law, his views in becoming less paradoxical have become sounder and truer. In both treatises he maintains that these titles are determined partly by perception of utility and partly by "habitual connection of ideas and smooth transition of the imagination": but in the earlier work he had obviously much exaggerated this latter element.

Granting, however, that the difference between the two publications was to be ignored, there seems little fault to be found with Dr. Jödl's exposition: except that he sometimes inclines to the common error of treating Hume as a dogmatic Empiricist rather than a Sceptic. Thus he assimilates his author's doctrine as to the external world too closely to Berkeley's: and gives too Kantian a colour to his account of causality, as (e.g.) in the following summary:—

"Der Gebrauch des Causalitätsverhältnisses ist zwar für unsere Erkenntniß innerhalb unseres Vorstellens und für unsern praktischen Gebrauch von *unbestreitbarer Gültigkeit*, soweit die Aufeinanderfolge zweier Objecte eine regelmässige ist: seine Anwendung auf das *Sein an sich* und ausserhalb unserer Erfahrung in seinem Vernunftgebrauche aber durchaus unsicher und unzulässig."

Now this distinction of "*Sein an sich*" and "*Erfahrung*" does not properly belong to Hume: and it is misleading to represent him as claiming "*indisputable validity*" for the use of the principle of causality even within the sphere of experience. He held that its application within that sphere was irresistibly prompted by Habit and imperatively imposed by Common Sense: but still not justifiable, on strictly rational grounds.

The few criticisms on which Dr. Jödl has ventured seem rather loose and superficial. Even where they are substantially well founded, they are wanting in the closeness which we may reasonably expect from a commentator: as Dr. Jödl generally fails to notice and meet the answers which Hume has made beforehand to his objections. For example, he argues (after Maine de Biran and others) that

the original "*impression*" from which our "*idea*" of cause is derived may be found in our inner experience: that "*das freiwillige Hervorrufen von Erinnerungen, die Verstärkung von Gedanken, die Bewegung eines Gliedes von einem darauf gerichteten Willensakte aus,*" &c. afford us an "*unmittelbare Wahrnehmung des Causalitätsverhältnisses*." But if by "*unmittelbar*" it is implied that the perception is certain and infallible, Hume's refutation of this view (in § vii. of the *Inquiry into the Nature of the Understanding*) is surely complete. If however it be argued—as I should myself argue—that perfect clearness and certainty are to be found in no class of our empirical judgments, and therefore the Empiricist has no right to demand them in the apprehension of causation: then there seems no reason to deny "*immediateness*"—thus qualified—to our cognitions of the causal nexus in the case of familiar external phenomena.

H. SIDGWICK.

Notes of Scientific Work.

Geography.

Arctic Regions.—The sixty-seventh paper on the Geography and Exploration of the Polar Regions by Dr. Petermann, about to be published in the *Mittheilungen*, gives news of voyages made during this season, down to September. Two Norwegian steam-ship fishing expeditions, planned to penetrate the Siberian seas, have failed through the obstruction of heavy ice and damage of the vessels, and both were compelled to return early in the year; on the other hand, a scientific expedition from Norway next season is much spoken of at Tromsö.—The French expedition under Albert and Mack has also been delayed, on account of the litigation which has arisen in Paris respecting the disposition of the legacy of Gustave Lambert, the originator of the scheme. M. Octave Pavy, it is believed, has at length started with his long-prepared expedition from San Francisco; he aims at reaching Wrangell Land, north of Siberia, in September, and to move thence northward over the ice till May 1873, about which time, it is anticipated, an open polar sea will be reached; this polynia he intends to navigate in a raft constructed mainly of india-rubber, crossing it to Smith Sound and North America, taking the North Pole by the way. Pavy's chosen companions for the enterprise are: Dr. Chesmore, an experienced traveller in Alaska; Captain Mikes, who a few years ago attempted a voyage from America to Europe in an india-rubber boat; Watkins, a Rocky Mountain hunter; and two sailors.—The latest authentic news of the American expedition under Hall comes from Tessiusak, in 73° 22' N., the furthest Danish colony of Greenland; and the report of the condition of the ice to northward, in August 1871, is favourable to the voyage. Very interesting letters despatched by Payer and Weyprecht, the leaders of the Austrian expedition, immediately before its departure from Tromsö in July, give full particulars of the outfit and plan of this scientific voyage; the supplementary expedition to this under Count Wilczek left Tromsö on the 20th of June.—The Swedish government expedition in the iron steamer *Pohlem* left Tromsö on the 20th of July, and on the 4th of August reached Green Island, on the west coast of Spitzbergen, on its way to the Parry Islands. Most interesting news is contained in a telegraphic message from Hammerfest, dated 24th of August: Captain Altmann, in a fishing vessel, sailed this summer along the whole east coast of Spitzbergen, as far as King Karl Land, which this voyager found to be a group of three larger and many smaller islands. The sea was quite free from ice.—Of interest in connection with this subject is an account of the finding of the relics of Barents' expedition of 1597 to Novaia Zemlia, by Captain Carlsen in 1871, prepared by M. de Jonge, and newly published under the auspices of the Dutch government at the Hague.* The pamphlet contains the journal kept by Carlsen, and a minute description of the relics, accompanied by a photograph of these in a group, and charts comparing the Novaia Zemlia of Barents with the island as mapped from our present knowledge of it.

Elevation of Eastern Siberia.—An annotated list of the geographical positions and absolute height above the sea-level of several hundreds of places in Siberia, the north coast lands and Kamtchatka alone excepted, prepared by Prince Krapotkin for the *Mittheilungen*, forms a most valuable contribution to exact geography. The name of the authority for each elevation is given, as well as the observatory to which it is referred, and the heights of the more important points are fully discussed in detail.

* *Nova Zembla. De voorwerpen door de Nederlandse zeeverviers na hunne overwintering aldaar in 1597 achtergelaten en in 1871 door Kapitein Carlsen teruggevonden, beschreven en toegelicht door Ihr. Mr. J. K. G. de Jonge;* 's Gravenhage: Nijhoff.

Present Population of the Globe.—*Ergänzungshft.* No. 33 of the *Mittheilungen* is devoted to an essay by Dr. Behm, the editor of the now standard *Geographisches Jahrbuch*, and Dr. Wagner, under whose care the statistical tables of the *Almanach de Gotha* are prepared, on the changes which have taken place in territory and population throughout the globe during 1869, 1870, and 1871. The untiring labours of these gentlemen in collecting accurate statistics of these subjects from all parts of the world, and the exceeding care which has been taken in comparing and selecting them, have made Gotha the head-quarters of information in this branch of science. The summation of the many special tables for each region gives the total population of the globe at present as thirteen hundred and seventy-seven millions of souls, which must be accepted as the nearest approach yet made to the true number.

Physiology.

Physiology of the Sphincter Vesicae.—Dr. J. Kupressow, in an inaugural dissertation upon this subject in *Pflüger's Archiv*, states that his experiments have been conducted in a manner essentially similar to those of Heidenhain and Colberg, a tube being fastened into the ureter of rabbits, and water poured through it into the bladder till the pressure of the fluid overcame the resistance of the sphincter. He found that in the living rabbit the pressure required to produce a flow of water from the urethra varied from that of a column of water 36 centimetres in height to one of 58 centimetres. Sex did not appear to make any remarkable difference. After death the height of the column required to cause a flow was only from 8 to 16 centimetres. Division of the spinal cord opposite the fifth lumbar vertebra reduced the height of the column of fluid rather slowly to the latter amount, but division at the sixth reduced it immediately. Section between the first and fourth lumbar vertebra was without influence upon the height of the column. It appears clear then that the centre of innervation of the sphincter lies in the spinal cord opposite the fifth and sixth lumbar vertebrae. The question arises, what is to be included in the term *Sphincter vesicae*? is it to be limited to the circular fibres of the neck of the bladder, the so-called *Musculus sphincter vesicae internus* of Henle, or to the similarly running fibres which are found in the urethra, and especially in the *pars membranacea*? Kupressow's experiments have led him to the conclusion that both sets of fibres aid in effecting the closure of the bladder, though their relative importance varies with the sex of the animal; in males the circular muscular fibres of the urethra play a much more important part than in the female, for whilst in the former after slitting up the urethra the height of the expelling water column is reduced to one-half of its original amount, with females the same operation only reduces it one-fourth.

Action of Tartar Emetic in producing Vomiting.—There are two views regarding the nature of the action of this substance in producing vomiting. By some it is attributed to the action of this salt on a special nervous centre, whence proceed the impulses co-ordinating the muscles by which vomiting is effected. Others maintain that it results from the irritation of the peripheral extremities of the nerves of the stomach. Strong evidence in favour of this is afforded by the fact stated by Grimm, and recently substantiated by Kleimann and Simonenitsch (*Pflüger's Archiv*, p. 281), that a solution of tartar emetic acts more rapidly and energetically when introduced into the stomach than when injected into the veins. The following is one of their experiments. About two-thirds of a grain of tartarised antimony was injected into the stomach of a middle-sized dog; vomiting occurred in fifteen minutes. Two hours later half a grain more was given, and vomiting again occurred in two hours. On the following day half a grain was injected into the jugular vein, which caused no vomiting. Three days later a grain and a half was injected into the vein at 11 A.M.; vomiting occurred, but not until the evening. Analysis showed moreover that, after injection into the veins, tartarised antimony made its appearance in the first matters that were ejected from the stomach. The authors do not find any real opposition to their views in the fact that efforts at vomiting will still occur after the stomach has been excised from the body altogether, since there may still be nerve terminations in the oesophagus and intestines which occasion efforts at vomiting when irritated by tartar emetic.

Effects of Compressed Air.—At the Séance of the Académie des Sciences held 1st July, M. Bert communicated the results of his investigations regarding the influence of pressure upon animals. He has arrived at the conclusion that pressure is injurious, not *per se*, but because it leads to an increase or accumulation of the quantity of oxygen in the blood, consequent upon the respiration of the compressed air. He recommends therefore as likely to prove of use an artificial modification in the composition of the air supplied to divers.

Zoology.

The Sumatran Rhinoceros in London.—We learn with regret that one of the two-horned rhinoceroses in the possession of the Zoological Society of London died about a fortnight ago. One was

captured at Chittagong, and the other, which is dead, in Malacca, both being thought at one time to belong to the Sumatran species described by Bell in the *Philos. Transactions* of 1793 under the name of *Rhinoceros sumatrensis*. When the two animals were compared side by side, no doubt could be entertained of their specific distinctness, and, consequently, Mr. Sclater, the secretary of the society, named the grey-coloured Chittagong specimen *Rhinoceros lasios* (the animal having a fringe of long hairs round the ears), retaining Bell's denomination for the black Malacca animal. Dr. Gray, after an examination of the published accounts of these animals, came to a different conclusion, viz. that the Chittagong specimen was the true *Rhinoceros sumatrensis*, and the other was most probably the animal to which the horn should be assigned, named by him, many years ago, *Rhinoceros crossii*. A third and different view is taken by Mr. Blyth, who points out that neither of the two examples can be referred with certainty to the Sumatran type; that the Chittagong animal is probably Gray's *Rhinoceros crossii*, and the Malacca animal a new species. It is not very likely that with the scanty materials in London the question will or can be satisfactorily settled at present, still it is not unimportant to have it finally solved. Abstractly from the point of view that we should ascertain as soon as possible everything respecting the big land creatures of the present period, a correct knowledge of them would prove of the greatest assistance in understanding the remains of their extinct congeners. Only a short time since the existence of a greater number of species than that generally adopted by zoologists was maintained by Dr. Gray, on apparently dubious osteological evidence, though this idea was entertained by very few zoologists, and ridiculed by others. Now it seems that of the type of two-horned Asiatic rhinoceroses, two months ago believed to be represented by a single species, three different kinds exist, and possibly four, if the Bornean rhinoceros, known by hearsay only, should prove to be distinct.

Picus leuconotus in Great Britain.—In the years 1861 and 1868 large flocks of a spotted woodpecker appeared in various parts of the Shetland Islands. They appear to have come from a considerable distance, and alighting in a locality ill adapted to their natural habits, they were compelled to seek their food along the shore; one specimen, on dissection, was found to have earthworms in its stomach. At first the birds were taken for the greater spotted woodpecker (*Picus major*) which had wandered from some other part of Great Britain; and in the account of this species the fact has already been recorded by Messrs. Sharpe and Dresser (*Birds of Europe*, vol. i.). Mr. Gould, however, who has obtained an example, is of the opinion that it is *Picus leuconotus*, a species whose home is Scandinavia and the North of Europe generally. If Mr. Gould's view be correct, and we have no doubt it is, these birds have immigrated, probably from Norway; and the white-backed wood-pecker must now be added to the British Fauna.

Vanessa antilopa in Great Britain.—Nearly two hundred reports have been received from all parts of the country of the appearance of the rare and beautiful butterfly commonly known by the name of the "Camberwell Beauty." Entomologists are not agreed whether the specimens are genuine natives, or imported, or immigrants from the continent; some observers believe they have observed the recurrence of this species every seventh year. It has also been remarked that nearly all the specimens taken in Great Britain differ, to a perceptible extent, in colouring from the continental type, the border being creamy-white instead of buff-coloured. No conclusion regarding their origin, however, can be drawn from this circumstance, inasmuch as it is the general opinion of continental collectors that the buff or yellow border of the wing is the sexual characteristic of the male, while in the females this part is of a white colour. Nothing would be easier than for some person to introduce large numbers of this butterfly, as the caterpillar is gregarious, feeding on the willow; still the facts of the insect in the perfect state having been found in many districts, from the Channel Islands to Aberdeen, and that not a single instance of its having been discovered in the larval state is recorded, favour the opinion that this is a case of spontaneous immigration.

Madeiran Spiders.—Mr. F. Pollock has published some observations on Madeiran spiders in the *Ann. and Mag. Nat. Hist.* for the present month. Although the islands of Madeira, Porto Santo, and Deserta Grande, lie within a range of about fifty miles, each has its own peculiar spider of the genus *Lycosa*; and it is a remarkable fact that these spiders vary in size inversely with the magnitude of the island in which they are found—Madeira, the largest island, having the smallest species, and Deserta Grande, the smallest island, being inhabited by the largest (*Lycosa ingens*). The latter species is able to prey on lizards three inches long, which it devours, head, bones, claws, and all, the only remnant of the feast being a small ball, about $\frac{1}{4}$ of an inch in diameter, which is cast aside at the bottom of the cage.

Tortoises, Terrapins, and Turtles, drawn from Life. By James de Carle Sowerby and Edward Lear.—This work contains sixty coloured lithographic plates, representing thirty-six species, drawn from living examples. They have been prepared under the superintendence of Mr. Th. Bell, to illustrate his *Monograph of the Testudinata*, a work the

publication of which was unfortunately interrupted many years ago. The unpublished plates were afterwards purchased by Mr. Sotheran, and Mr. Bell having declined to furnish descriptions of them, Dr. Gray consented to edit the work. In the notes of the editor the original name given by Bell to each species is retained, as well as the name used in the British Museum Catalogue, together with the references to a work in which the synonymy of the species is to be found. A few lines on the habits of the species are added from works of authors who have had the opportunity of observing them in their wild state. It would indeed have been a matter of regret if such beautiful plates, and the amount of work bestowed on them, had been lost to science.

A Handbook of British Birds, showing the Distribution of the Resident and Migratory Species in the British Islands, with an Index to the Records of the Rarer Visitants. By J. E. Harting.—This is an extremely useful and handy little volume. The author divides the real British birds into three groups:—1. *Residents*, or those species which rear their young annually in the British Islands, and are to be found in one part or other of the United Kingdom throughout the year; they are 130 in number. 2. *Periodical Migrants*, or those which visit us annually and regularly at particular seasons, and whose advent and departure may be foretold with precision; they are 100 in number. 3. *Annual Visitants*, that is, such as annually occur in some part of the British Islands, but in comparatively very limited numbers, and at irregular and uncertain intervals; only 30 belong to this division. In addition to this fauna are the *Rare and Accidental Visitants*, numbering 135, among which we notice 48 to be of European, 14 of Asiatic, 11 of African, and 42 of American origin, oceanic birds excluded. The author has conscientiously collected and critically examined all the instances of occurrence of birds of this class.

On Recent Moa Remains in New Zealand.—In the fourth volume of the *Transactions and Proceedings of the New Zealand Institute*, Dr. Hector gives an interesting description and figure of a moa's egg containing the bones of an embryo chick found at Cromwell in 1867, imbedded in sand; and he further records the recent discovery of the cervical vertebrae of a full-sized moa, with the skin partly covered by feathers still attached by the shrivelled muscles and ligaments. This interesting relic is from a cave at the foot of the Obelisk range of hills between Obelisk and Alexandra, Otago; into which it, as well as numerous other moa remains, had been washed. The colour of the barbs of the feathers, which have two equal plumes to each quill, is a chesnut red, the surface of the skin of a dirty red-brown colour roughened by numerous elevated conical papillae. The occurrence of this example, as well as that of some moa remains found by Mr. W. A. Low in 1871, in which portions of the bird's flesh "not the least fossilized, but simply well-dried, can be easily separated into fibres," affords strong evidence in favour of Dr. Hector's view that the moa must have existed at no very remote period in the province of Otago. Apropos of the comparatively recent discovery of large quantities of *Dinornis* remains, it is interesting to find that the natives most carefully preserved both the forests and the underwood as cover for the game upon which their subsistence depended. Since European settlers have occupied the islands, immense tracts have been disafforested by fire and the undergrowth destroyed. The rains, formerly impeded in their eroding action by the vegetation, now cut deep ravines and wash the soil from the undulating surfaces of the country, and in this way first expose and then wash away and destroy the buried remains of the moa, which the vegetation had preserved since the extinction of this bird by the early ancestors of the present Maori race.

With the conclusion of the seventh volume, the publication of the *American Journal on Conchology* has ceased. It was issued under the auspices of the Academy of Natural Sciences of Philadelphia, in the *Journal and Proceedings* of which institution all future communications will appear.

Botany.

Genealogy of the Wellingtonias.—The address by Professor Asa Gray, the retiring president of the American Association for the Advancement of Science, delivered at the meeting held in August last, at Dubuque, Iowa, was mainly occupied with an attempt to trace the history of the gigantic trees which form such a conspicuous feature of the vegetation of California. The only members of the tribe to which they belong at present existing are four in number, scattered over different quarters of the globe: the two species of Californian redwood, the *Sequoia* (*Wellingtonia gigantea*) of the Sierra, and *S. sempervirens* of the coast; the bald cypress (*Taxodium distichum*) of the Southern States, inhabiting swamps of the Atlantic coast from Maryland to Texas, and Mexico; and the *Glyptostrobus* of China. In its general features the vegetation of California is most strikingly unlike that of the Eastern United States; while, notwithstanding the attempt of Grisebach to prove the contrary, the relations between the floras of the Atlantic United States and Japan (including Northern China) are remarkably close. Fossil remains of a species of *Sequoia* almost identical with *S. sempervirens* have been found by Heer in the Miocene formation which extends over the whole of Northern Europe, and of an extremely similar

one by Hayden in the Rocky Mountains. There seems every reason to believe that at this period a nearly uniform flora overspread almost the whole of what are now the arctic and temperate regions of the northern hemispheres, of which the present floras of North-Eastern Asia and North-Eastern America are remnants. Of the three hypotheses which might be framed to account for the existence of these solitary detached representatives of the tribe—that they are the progenitors of a new form of vegetation, that they were created as we now find them, or that they are the last representatives of a race rapidly dying out—the above considerations leave us in no doubt to accept the last. The *Sequoia gigantea* now exists in numbers so limited that the separate groves may be reckoned on the fingers, and the trees of most of them have been counted, except near their southern limit, where they are said to be more abundant. A somewhat greater dryness of the climate, which must once have been much more moist than it is now, would probably bring about its speedy extinction.

Luminosity of Fungi.—The Rev. M. J. Berkeley records in the *Gardener's Chronicle* a very remarkable instance of luminosity in Fungi which has been observed in Northamptonshire. A quantity of wood, it is uncertain whether larch or spruce, being dragged along a road, was found to emit a bright light. The entire inner surface of the bark of the log was covered with a white mycelium of a peculiarly strong smell, and so luminous a character that it was almost possible to read the time on the face of a watch. This luminosity continued for three days. Rubbing the luminous part appeared to render the brightness more intense. The parts of the wood that were most luminous were not only deeply penetrated by the more delicate parts of the mycelium, but were also the most decomposed. Mr. W. G. Smith believes the mycelium to be that of *Polyporus annosus*, which is occasionally phosphorescent when found growing in the coal mines of Glamorganshire and Carmarthenshire.

Fertilisation of the Yucca.—At the last meeting of the American Association for the Advancement of Science, Mr. C. V. Riley read a paper on the Fertilisation of the American Yucca, showing that it is accomplished by a small moth, hitherto undescribed, which he called *Pronuba Yuccella*, and which appears to be specially adapted for the purpose. The female only has the basal joint of the maxillary palpus wonderfully modified into a long prehensile-spined tentacle. With this tentacle she collects the pollen, thrusts it into the stigmatic tube, and having thus fertilised the flower, she consigns a few eggs to the young fruit, the seeds of which her larvae feed on. The yucca is said to be the only plant known which absolutely depends for fertilisation on a single species of insect. The plant and its fructifier are inseparable, under natural conditions, and the latter occurs throughout the native home of the flower. In the northern parts of the United States, and in Europe, where the yuccas have been introduced and are cultivated for their showy blossoms, the plant, being deprived of the good offices of this insect, produces no seed. The larva of the *Pronuba*, it should be mentioned, eats through the yucca capsule constituting its food, enters the ground, and hibernates there in an oval silken cocoon. It would no doubt be possible to introduce it in foreign countries, and thus secure the fertilisation of the yucca.

Chemistry.

Synthesis of Orcin.—At the first meeting of the Association française pour l'Avancement des Sciences, held last month at Bordeaux, several important papers were laid before the chemical section over which M. Balard presided. One by M. Berthelot on the state of substances in solution is of great interest. In another (*Revue scientifique*, 12, 272), M. Henniger communicated the results of the endeavours of M. Vogt and himself to obtain orcin artificially, which they accomplished from toluene. They converted the chloride into the acid sulpho-conjugate by Wurtz's method, and by fusing this product with potash obtained orcin identical with that occurring in lichens. Orcin is a diphenol of the aromatic series, $C_6H_3(CH_3)_2(OH)_2$.

Guadalcasarite.—This name has been given by T. Petersen (*Jour. prakt. Chemie*, 6, 80) to a new mineral occurring with cinnabar, at Guadalcasar, in Mexico. It is compact, sub-crystalline, of an iron-black colour with a bluish streak, very brittle, and so soft that it may easily be crumbled between the fingers. It has a specific gravity of 7·15, and a composition indicated by the formula $6HgS + ZnS$, where some portion of the sulphur is replaced by selenium, and a still smaller quantity of the zinc by cadmium.

Syngenite.—At the forty-fifth Versammlung Deutscher Naturforscher held last month at Leipzig, Prof. v. Zepharovich (*Tageblatt*, 135) described a new mineral from the potash beds of the salt mines of Kalusz, in Galicia. It occurs with cubes of sylvine in colourless pellucid crystals that at first sight suggest selenite. Analysis proved them to have a composition corresponding with the formula $CaSO_4 \cdot K_2SO_4 \cdot H_2O$, showing it to be a substance nearly allied to polyhalite. The crystals are rhombic, and accord in every respect with the well-known laboratory product, except that they show a greater abundance of crystal faces. The hardness of this new mineral is 2·5, the specific gravity 2·73.

Nitric Anhydride.—At the same meeting, Prof. Weber described his method of forming the anhydrous acid by decomposing the most concentrated acid with phosphoric anhydride. This is added in small portions to the acid cooled in ice, and the mixture is then cautiously distilled. Two liquids pass over that are not miscible, the upper consisting for the most part of the anhydride, the other a new hydrate. From the former the anhydride is prepared by first gentle, then powerful cooling; hydrated compounds separate first, then the anhydride. The latter is without action on the majority of metallic substances, but reacts with great violence on the metalloids as well as on organic bodies. It is soluble to some extent in the strongest nitric acid, whence by cooling a crystallised hydrate evaporates, containing half the water of the monohydrate.—The author likewise exhibited crystallized phosphoric anhydride formed by sublimation.

New Publications.

- BOECKEL, J. *Etude clinique et expérimentale sur les Battements du Tissu médullaire des Os.* Strassburg : Treuttel und Würtz.
- BRAUER, F. *Beiträge zur Kenntniss der Phyllopoden.* Wien : Gerold's Sohn.
- CARUS, J. v. *Geschichte der Zoologie.* München : Oldenbourg.
- DESCHANEL, A. P. *Elementary Treatise on Natural Philosophy.* Translated by J. D. Everett. Blackie and Son.
- DUPONT, E. *L'Homme pendant les âges de la pierre dans les environs de Dinant-sur-Meuse.* Bruxelles : Muquardt.
- FAIVRE, A. *De quelques Travaux récents sur les corps organisés flottant dans l'atmosphère.* Lyon : Vingtrinier.
- GEORG, W., und WANDERLEY, G. *Der Metallbau.* Halle : Knapp.
- HOEFFEL, J. *Aperçu historique sur l'ancienne Faculté de Médecine de Strasbourg.* Strassburg : Treuttel und Würtz.
- HOFMEISTER, F. *Untersuchungen über die Zwischensubstanz im Hoden der Säugethiere.* Wien : Gerold's Sohn.
- LITTROW, C. v. *Bericht über die von C. Bruhns, W. Förster und E. Weiss ausgeführten Bestimmungen der Meridiandifferenzen Berlin-Wien-Leipzig.* Wien : Gerold's Sohn.

History.

Tridentine Archives in Austria. [Zur Geschichte des Concils von Trient (1559–1563). Actenstücke aus Oesterreichischen Archiven. Herausgegeben von Th. Sickel.] Wien : Gerold's Sohn.

IT is partly, perhaps, to the Vatican Council that we may ascribe the increased interest felt of late in the history of the Council of Trent, but something is also due to the recent opening up of the Austrian archives to historical enquirers, which has for the first time given us access to many of the original documents. Thus, also, it has become possible to test the statements of the two great party Histories of Sarpi and Pallavicini. It is often said that by striking a mean between the opposite statements we arrive at the truth, but it is not so. The actual fact on which the two representations are based can seldom be reproduced exactly, in most cases we can only guess at it. It is a favourable instance when, after Sarpi stating that there was an actual treaty with France, and Pallavicini positively denying it, we find the fact to have been that there was a verbal agreement concluded. Sarpi's history has always been a favourite one in England, and we rather wonder at its not having been lately republished. Sarpi was so hostile to the Curia Romana (being a sort of "Old Catholic") that he could hardly venture to print his book in Italy. It was consequently first published in England by Antonio di Dominis, the famous archbishop of Spalatro (about whom we hear so much in James I.'s reign), under the patronage of Archbishop Abbot, who also induced Nathanael Brent, the warden of Merton College, to translate it, and the translation was published in 1620. Sarpi, who was born 1552, eleven years before the close of the Council, wrote soon after it, while it was still fresh in men's memory, and many who had been present were still alive, and he had the advantage of consulting many manuscript accounts. He says himself that

he had searched in "the writings of the prelates and others who were present in the Council, the records which they left behind them, and the suffrages or opinions delivered in public, preserved by the authors themselves or by others, and the letters of advice written from that city, whereby I have had the favour to see even a whole register of notes and letters of those persons who had a great part in those negotiations." He quotes, for instance (near the beginning of book ii.), "the register of the letters of the Cardinal of Monte." Pallavicini (*b. 1607, d. 1667*), on the other hand, wrote half a century later, and published his book 1664, when not a few of Sarpi's documents were no longer accessible. He had, however, the full use of the Vatican archives, and gives indispensable information, though sometimes omitting, and sometimes discrediting, genuine documents, e.g. the letters of Paul III. to the Emperor. On the whole, the papers published by Sickel confirm Sarpi in several of the disputed points, though a few of his dates appear to be wrong. (Even Pallavicini's dates are not always right.) A dozen years ago Sickel saw at Vienna a bundle of documents, containing, among other things, the preliminary rough draft of the "Articles of Reform" which the Emperor Ferdinand I. proposed to the Council, for the discovery of which Ranke, in his *History of the Popes*, expressed an earnest wish. At that time, however, the papers about the Council preserved at Vienna were purposely withheld from historical enquirers; now, under von Arneth's liberal management of the Record Office, things are very different, and Sickel has been enabled to treat the German documents on the plan which Dupuy adopted for those of France. His scheme combines an account of the proceedings relative to the Council with those relative to the whole intercourse between Pius IV. and Ferdinand I., though the materials have so grown on him that this volume only takes us down to the close of the Council in 1563. The discoveries at Vienna led him on to Innspruck and Trent itself, where he found Professor Friedrich, of Munich, also engaged on making a catalogue of the materials for the history of the Council. Thence he went to Arco, in the Tyrol, where the correspondence of Prospero d'Arco is preserved, who was ambassador at Rome for Ferdinand I. and Maximilian II. from 1560 to 1572. Besides the original letters of the emperors and archdukes, there are many news-letters and some of "Pasquin's" satires from Rome (Sickel prints two of these as specimens). As his object is in the main to give only inedited matter, the editor has omitted all that is already printed in the great collection of Le Plat, in Döllinger's *Beiträge*, in Mendham's book, &c. (he does not mention the translation of some of Vargas' letters by Dr. Geddes). But the excellent notes often contain an abstract of these as well as of many inedited documents not worth giving *in extenso*. The book begins with July 1559, when the death of Paul IV. was expected. That pope had been a bitter enemy of the whole house of Austria; and, in fact, the quarrel between the papacy and the imperial power had contributed, perhaps more than any other external cause, to the establishment of Protestantism in Germany. The German ambassador had been even forced to leave Rome, and now the Emperor sends a despatch to his ambassador at Venice, ordering him to go to Rome the moment the news of Paul's death should arrive, and enclosing credentials for the Conclave and several friendly cardinals, one of whom, Morone, the statesman who afterwards successfully concluded the Council, had been actually imprisoned in St. Angelo. Paul died August 18, and the news reached Ferdinand at Munich by the 25th, but it had already reached the ambassador at Venice at four o'clock in the night of Sunday the 20th, and by the "24th hour of that day" he was on

shipboard for Rome, which he reached on the 28th. It is worth noting that the north post went out of Rome every Saturday, but special couriers were often despatched by the ambassadors. Once a letter reached Vienna in nine days, but usually it took a fortnight. Sometimes duplicate letters were sent by Venice and by Trent. The return post was much slower, and Arco is always complaining of it. The Emperor's letter of July 25 only reached him on August 22. At last the King of Poland established a post between Cracow and Venice, which rather improved matters for Vienna. Once Arco received nothing from the 28th of November 1560 to 28th January 1561, and then a whole bundle of despatches reached him together. The same difficulty of correspondence occurs between Spain and the Netherlands, and is not always enough allowed for by historians, e.g. as to the Spanish Armada. The Conclave of Cardinals received the ambassador gladly, and gave him his proper title and place, though Paul had up to his death refused to ratify the Emperor's election, on the ground of his consenting to the Peace of Passau, though it was rendered necessary owing to the defeat of Charles V. by Maurice of Saxony. Pius V., the new pope, was better disposed, and was even inclined to think the two concessions to the Protestants advised by the Emperor, viz. giving the cup to the laity, and the marriage of priests, which were not forbidden by God's law, but merely *juris positivi*, might be made. During the conclave itself the Cardinal of Augsburg was surprised at hearing him say so, and appeal to the concessions made to the Greek Church, and to those made by the Council of Constance to the Bohemians, and to Paul III.'s instructions to his legates in 1548. As to the question in dispute between Sarpi's and Pallavicini's accounts, whether it was the princes or the pope who first pressed for the assembly of a council, the documents do not quite settle the question. It is clear that Pius was urged on by the fear that Germany and France would summon national councils and perhaps settle the matter without him, as they threatened to do; but he was also himself anxious for a considerable reform, and behind both pope and princes there was the still greater power of the advancing tide of Catholic public opinion, which was rapidly hastening the counter-reformation. The Pope carried his point that it should not be a new council, but a resumption of the two previous meetings of the "Council of Trent," in 1545 and 1551, and this finally made a reconciliation with the Protestants hopeless. He also secured his legates the right of initiating measures, though Germans, French, and Spaniards, were united in opposition, but they were outvoted by the mass of Italian bishops, many of whom, being very poor, were partly maintained by the Pope. The whole details supply curious parallels to late events. Sickel gives a valuable note on the means employed to raise new taxes at this time in the Roman States, and the fruitless opposition of the municipal authorities. At last the Emperor despaired of gaining concessions for the Protestants from the Council, and the Great Powers consented to its close. It practically abandoned the claim of superiority to the papacy, put forth at the Council of Constance, and even asked Pius to make its decrees valid by ratifying them. The old view, however, survived in the Gallican Church, and the speech of the French envoy before the Council was very bold indeed. The Cardinal of Lorraine however was gained over, and Pius in general abandoning any open assertion of the old papal claims to rule over kings aimed rather at forming a close union with them, and especially with Philip of Spain. The speech of Lainez, the general of the Jesuits (reported p. 547), on the absolute power of the Pope and the uselessness of their discussions, gave excessive offence; but it showed practically how

things were going. It is questionable if a reconciliation with the Protestants was ever possible after Contarini's failure at Ratisbon, and the conduct of Paul III. and Paul IV. had allowed them time to strengthen themselves; but the Emperor was still powerful enough to maintain the religious peace in Germany, and was seconded in this by the Duke of Bavaria, though at Rome some were reviving the memory of Innocent III. and pressing for war, and the Pope would have liked to destroy "the sink of heresy at Geneva." The Thirty Years' War was not possible till Ferdinand II. of Austria and Maximilian of Bavaria succeeded, and through them the Jesuit influence became supreme. The germ of all these later events is to be traced in the documents before us, and there is a sense of reality in the vivid impressions of each moment as they are rapidly written down (the Emperor sometimes sent two or three successive letters the same day), which brings it all home to us far more than the best modern account, even that of Ranke, can do. And this is why the study of history cannot be profitably carried on without the use of original documents, since nothing else can reproduce for us the actual living men as they thought and spoke and lived, and surround us as it were with the atmosphere of the time. Pius IV. is especially well described to us as the pope of the transition. If there had been a pope of Hildebrand's ability, with the power to see that it was time to resign the dictatorship so long entrusted by Europe to the Italian see, the hopes attached to the assembly of a General Council which should be "free and oecumenical" might have been realised; but the system based on the false decretals was perhaps developed too thoroughly to admit of change; as in so many cases its past history determined its permanent course in one direction. There are a number of striking despatches given at length, such as Ferdinand's answer to the charges of Paul IV., his proposals of reform, two which describe the state of Bohemia, one on the state of Catholic Germany. The Emperor laments the want of able and moderate German theologians; the best were now on the side of the Protestants; there was no name to show like that of Melanchthon. Canisius and Staphylus were of some service, and Gienger wrote a series of theological notes for the Emperor. Bavaria, too, sent Paumgartner to the Council. On all these there are excellent notices given. Some interesting despatches from Rome are sent by Cusano to Maximilian, who was then trying to secure his election as King of the Romans, but was suspected at Rome of being inclined to the Lutherans. Cusano sends all the gossip and the reports current in society, and Ferdinand is sometimes annoyed that his son hears of things before he does. So Arco finds it necessary to make his reports longer and give all the news, though often obliged to state its untrustworthy character. The ambassadors at Trent gradually began to see that their task was hopeless, and they and the Emperor became tired of the work. They complain (and the complaint occurs often enough in the contemporary despatches of English ambassadors) that their salaries were not paid, and at last they were so much in debt as to be almost unable to leave Trent. They repeatedly notice the objection of the bishops and wealthy clergy to have residence enforced, for then, as at a later time in England, non-residence was most common in the case of the rich livings, two or more of which were held by some influential person who did not reside on either. But the rising Catholic spirit proved too strong for them, and the disciplinary decrees of the Council enabled Cardinal Carlo Borromeo (Pius IV.'s nephew) and others to carry out the reform. There was great need to begin with the cardinals themselves, as Pius IV. showed by executing for his crimes Paul IV.'s nephew, Cardinal Caraffa. One leading complaint was that they were appointed too

young. Leo X. was made cardinal at fourteen, and men despaired of reform from Paul III. after they saw him appoint his two grandchildren—the one at the age of fourteen, the other sixteen—to the cardinalate. Pius IV. broke up the old Nepotism; and when it revived afterwards, it was in another form.

We cannot close the book without expressing our satisfaction with the almost perfect way in which it is edited. The notes and illustrations are everything that could be wished, and such as we should expect from the editor of the *Carolingian Charters*. Sickel has also published *Die Geschäftsordnung des Concil von Trient, aus einer Handschrift des vaticanischen Archives*, by the secretary of the Council, A. Massarelli, Bishop of Telesia. Nor can we omit a word of praise for the beautiful printing of the Roman type, both large and small, which some German publishers are now substituting for the old black letter which other nations have given up long ago. Of English affairs there is naturally only slight mention in the book. Ferdinand advised against the excommunication of Elizabeth, and interceded with her for the Catholic bishops: there is mention of a petition signed by the Bishop of St. Asaph. Of Russia there are several notices. The Pope wished to invite the Duke of Russia ("Moschus") and the Prince of Transylvania to the Council. The Emperor objected to both, the latter being a rebel and allied with the Turks against him in Hungary, while the former was ravaging Livonia and oppressing the German inhabitants there. It is curious that the Germans in Livonia are at this very time complaining of Russian oppression and appealing to the Fatherland—an appeal in which some see the germ of the next great European war. The whole book abounds with interesting matter. We trust that Sickel may be soon able to publish the remaining documents to the close of Ferdinand's reign and show us the first results of the decrees of the Great Council.

C. W. BOASE.

Reports on the Discovery of Peru.—I. Report of Francisco de Xeres, Secretary to Francisco Pizarro; II. Report of Miguel de Astete on the Expedition to Pachacamac; III. Letter of Hernando Pizarro to the Royal Audience of Santo Domingo; IV. Report of Pedro Sancho on the Partition of the Ransom of Atahualpa. Translated and edited with Notes and an Introduction by Clements R. Markham, C.B. London: printed for the Hakluyt Society.

OF the three (or four) reports contained in this volume, the more developed and interesting is certainly Xeres' narrative. Francisco de Xeres, the secretary of Pizarro, wrote his work in 1534, when sent in Spain to convey the first load of gold and silver that ever went from newly discovered Peru into the land of the conquerors.

As was very natural in a man suddenly thrown into an entirely new country, and understanding nothing or little of its native tongue, Xeres frequently commits blunders when speaking of things he did not know by eyesight, but only from hearsay. I am not astonished very much at minor improprieties of words, such as calling the Peruvian temples *mosques*, in which error Hernando Pizarro also concurs; their doing so was insomuch the more obvious that, as Mr. Markham justly observes, "the fathers of the Spanish conquerors had served in the campaign of Granada, and their minds were full of the things relating to the Moorish infidels." But there are mistakes of a more serious nature. Speaking of Atahualpa and Huascar, Xeres gives of their origin the most extraordinary account. He begins by calling their common father old Cuzco, Huascar being named all through young Cuzco, for distinction sake; and, in order that no one

may consider that as a mere slip of the memory and doubt his "mistaking the Piroeos for a man," he affirms that old Cuzco, our Huayna-Kapak,

"was a native of a province called Quito; but as he found the land where he was encamped to be pleasant, fertile, and rich, he settled there, and gave the name to a great city, where he lived, which was called the city of Cuzco. . . . It is eight years since he died, and he left as his heir a son of the same name as his own. He was a son of his legitimate wife. They call the principal wife, who is most loved by her husband, legitimate. This son was older than Atabaliba. The old Cuzco separated the province of Quito from the rest of the kingdom and left it to Atabaliba. The body of the Cuzco is in the province of Quito, where he died, and his head was conveyed to the city of Cuzco, where they hold it in great veneration, adorning it with gold and silver."

Now, there are almost as many blunders as there are phrases in this passage. Huayna-Kapak was not born at Quito, but conquered it, and took to his illegitimate wife the daughter of the Quitenó king, into whom he begat Atahualpa. The legitimate wife was not that whom her husband loved better, but must be the sister, or, at least, the first cousin, of the Ynca, of pure Ynca blood. As for Huayna-Kapak's dying at Quito and being mutilated after his death, in order that his head could be sent to Cuzco, the fact is that he died at Tumipampa, and was thence taken to Cuzco, where his body was discovered by the licentiate Polo in the year 1559.

Due allowance being made for these deficiencies, Xeres' narrative of the conquest is exceedingly interesting. Although it relate briefly Pizarro's early adventures and first tentative to conquer Peru, it really begins in the year 1530, when the author joined the decisive expedition, and became a witness with his eyes to the deeds he narrates so well:—

"Some portions of the story, here and there, are told in more detail by Herrera and other compilers, but in reading their versions we miss the feeling that the author was an actor in the deeds he narrates; and thus in Xeres there is a freshness and reality which no other published account of the conquest can impart."

The tale of Atahualpa's judgment and death will show to the reader the fitness of this appreciation, at the same time giving a good specimen of Mr. Markham's manner of translating.

"Then the governor, with the concurrence of the officers of his Majesty, and of the captains and persons of experience, sentenced Atabaliba to death. His sentence was that, for the treason he had committed, he should die by burning, unless he became a Christian; and this execution was for the security of the Christians, the good of the whole land, and to secure its conquest and pacification. For on the death of Atabaliba all his troops would presently disperse, and would not have the courage to attack us or to obey his orders.

"They brought out Atabaliba to execution; and when he came into the square, he said he would become a Christian. The governor was informed, and ordered him to be baptized. The ceremony was performed by the very reverend father Friar Vicente de Valverde. The governor then ordered that he should not be burnt, but that he should be fastened to a pole in the open space and strangled. This was done, and the body was left until the morning of the next day, when the monks, with the governor and other Spaniards, conveyed it into the church, where he was interred with much solemnity, and with all the honours that could be shown it. Such was the end of this man who had been so cruel. He died with great fortitude, and without showing any feeling, saying that he entrusted his children to the governor. When they took his body to be buried, there was loud mourning among the women and servants of his household. He died on Saturday, at the same hour that he was taken prisoner and defeated. Some said that it was for his sins that he died on the day and hour that he was seized. Thus he was punished for the great evils and cruelties that he had inflicted upon his vassals; for all, with one voice, declare that he was the greatest and most cruel butcher that had been seen among men; that for a very slight cause he would destroy a village, such as some trivial fault committed by a single man; and that he killed ten thousand persons, and held all the country by tyranny, so that he was heartily detested by all the inhabitants. . . .

"Now I wish to mention a notable thing. It is that twenty days before that happened, and before there were any tidings of the army that Atabaliba had ordered to be assembled, it happened that Atabaliba was one night very cheerful with some Spaniards with whom he

was conversing. Suddenly there appeared a sign in the heavens, in the direction of Cuzco, like a fiery comet, which lasted during the greater part of the night. When Atabaliba saw this sign, he said that a great lord would very soon have to die in this land."

Xeres had embodied in his work Miguel Estete's report of "The Journey made by el Señor Captain Hernando Pizarro, by order of the Governor, his Brother, from the City of Caxamalca to Parmacama, and thence to Xauxa." Don Miguel Estete, or Astete, de Santiago, the inspector, was the man who pulled the *llautu* from the head of Atahuallpa when he was dragged out of his litter. His narrative is precious especially when compared with the letter directed by Hernando Pizarro himself "To the Magnificent Lords, the Judges of the Royal Audience of His Majesty, who reside in the City of Santo Domingo." It was in Caxamalca, a few days after Atahuallpa's capture, that Pizarro's brother "received permission from the governor to go to a mosque of which he had intelligence, which was a hundred leagues away on the sea-coast in a town called Pachacamá." Pizarro's expedition had no less an object than the famous temple of Pachacamac, described afterwards by Cieza de Leon and Garcilasso de la Vega. In his appreciation of the Pachacamac worship, Mr. Markham differs entirely from the commonly received opinion. He sees no adequate authority for such theories as make Pachacamac, "Creator of the World," a divinity older than the time of the Yncas, and whose worship the Peruvians of Cuzco adopted from another people.

"The inhabitants of the Peruvian coast called *Yncas* by their Ynca conquerors were an entirely distinct race from the people of the Andes, with a language differing both in its vocabulary and grammatical construction. . . . Their gods were made to give out oracles, and the shrines became rich and important in proportion to the credit they attained in forecasting events. Thus, there was a famous oracle in the valley, thence called *Rimac*, or "The Speaker," by the Ynca conquerors; and a still more renowned one was the fish-god in the city, afterwards called by the Yncas *Pachacamac*, to which pilgrims resorted from all parts of the coast. But this fish-god was not Pachacamac, nor was the word Pachacamac known to the people of the coast before they were conquered by the Yncas. It is an Ynca word, and is wholly foreign to, and unconnected with, the coast language. . . . The conclusions I have formed are that the worship of Pachacamac, the Creator of the World, was a part of the Ynca religious belief, and that it was wholly unconnected with the coast Indians; that there never was any temple to Pachacamac at the place on the coast to which the Yncas gave that name, for some reason now forgotten; that the natives worshipped a fish-god there under a name now lost, which became famous as an oracle and attracted pilgrims; and that, when the Yncas conquered the place, they raised a temple to the sun on the summit of the hill commanding the city of the fish-god, whence the glorious luminary could be seen to descend behind the distant horizon, and bathe the ocean in floods of light."

The fourth document in the volume is a mere piece of comptability, being a "Report on the Distribution of the Ransom of Atahuallpa, certified by the Notary Pedro Sancho." It had been printed already in the *Vidas de Espanoles célebres, por Don Miguel José Quintana*; but the notes Mr. Markham has appended to his translation give it a vast amount of interest. It has the nominal list of all the conquerors present in the town of Caxamalca on the 18th of June of the year of 1533, with the gold and silver that each one received, in different columns, beginning with the "Church, 90 marks of silver, 2220 pesos of gold; and the Lord Governor, for his person, his interpreters, and horse, 2350 marks of silver, 57,220 pesos of gold," down to Cristobal de Sosa, who got only 135 marks of silver and 3330 pesos of gold. Mr. Markham has tried to show what became of the men named in the document, and has succeeded in tracing the fortunes of some of them to the moment of their death. They were killed for the most part during the civil wars which broke soon over the newly conquered kingdom and troubled its early days so much.

G. MASPERO.

Intelligence.

The death is announced of M. Roget, Baron de Belloguet, author of an *Ethnogénie gauloise*, which we shall soon review. Born in the year 1796, in the department of Haut-Rhin, M. de Belloguet was the son of a cavalry officer who became general under the first Napoleon; and he himself made, as a volunteer, the campaign of France (1815), during which he was, for his gallant behaviour, made Chevalier of the Legion of Honour, being only nineteen years of age. He remained in the army until 1834, when he retired from military service with the rank of chef d'escadron, to devote himself entirely to historical studies. His first works treated of some obscure points in the provincial history of Burgundy, and gold medals were awarded to them by the French Institute. In his later years M. de Belloguet directed his researches to the vexed question of Gaulish origins, and the result was his *Ethnogénie gauloise*, to which the "grand prix Gobert" was awarded by the Académie des Inscriptions et Belles-Lettres. M. de Belloguet died at Nice, the 3rd of August.

Clermont-Ganneau communicates to the Académie des Inscriptions three inscriptions, found at Jerusalem, of the Legio X Fretensis, famous for the share it took in Titus' siege, the last of which is ingeniously restored, but he makes a forced application of it to illustrate the dispute as to the site of the Holy Sepulchre. He would correct the text of the *Notitia Dignitatum*, which speaks of "Praefectus Legionis decimae Fretensis Aiae" (= Elath, on the Red Sea) by reading *Aelia, i.e. Jerusalem*, then called by the Romans *Aelia Capitolina*.

K. Klüpfel's *Geschichte der deutschen Einheitsbestrebungen bis zu ihrer Erfüllung, 1848-1871* (erster Band; Berlin, 1872), is an excellent continuation of a very good book by the same author: *Die deutschen Einheitsbestrebungen in ihrem geschichtlichen Zusammenhang* (Leipzig, 1853). The author, who, in his South German position, has been for many years a staunch and faithful supporter of German unity, hails the present fulfilment of the ideal of his youth from the bottom of his heart. He has taken up the work once more with the year 1848, being able to give a much fuller and riper account of the exploded, yet nevertheless fruitful, endeavours of that stormy period of German politics. Klüpfel is a master of lucid arrangement and sober judgment, disdaining all unnecessary trammels and matters of minor importance in a book chiefly destined for political instruction. His work proves again how much a sound and honest literature in favour of an indivisible German government has obtained the upper hand over the scared defenders of the sovereignty of the single states and their lame and loose confederation. Foreigners who wish to inform themselves in the history of the national mind within the last twenty or thirty years will not easily meet with a better guide.

The newest volume of Ranke's Collected Works, viz. vol. xxiv., offers the first instalment of dissertations and essays, either originally written for a periodical, which the author edited for a short time about forty years ago, or read in the Royal Academy at Berlin. The greater portion of these essays deal with Prussian history, the memoirs of Baron de Pöllnitz, and the Marchioness Wilhelmine of Bayreuth, with one of the historical works and the correspondence of Frederic the Great with William IV., Prince of Orange, and his wife, a daughter of George II. Two essays, however, are of a more general bearing, especially the first, treating about the great powers, France, England, Austria, Russia, and Prussia, in their relation to the French revolution—a consummate and highly finished sketch by a master hand. The second discusses the chief political theories of modern ages, those of the Jesuits as well as the doctrine of absolute sovereignty of temporal government. In the appendix is found a clever speech in Latin: "De historia et politice cognatione atque discriminis Oratio," delivered by Ranke in 1836, when taking possession of his chair in the university of Berlin.

At the annual meeting of the historical commission at Munich progress was reported of several of the society's publications. The most important of them for the ensuing year will be the beginning of a *Biographia Germanica*, a biographical cyclopaedia for Germany, of which a couple of volumes, containing letters A and B, are ready for the press, thanks to their indefatigable editor, Dr. von Liliencron, to whom the great collection of the historical poems of Germany had been entrusted by the commission some years ago.

New Publications.

BAYER, Dr. Vict. *De Historia Friderici III. Imperatoris d. Enea Silvio de' Piccolomini. Eine kritische Studie zur Geschichte Kaiser Friedrichs III.* Prag: Tempsky.

BONITZ, Herm. *Zur Erinnerung an Friedrich Adolf Trendelenburg.* (Academy Reprint.) Berlin: Dümmler.

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DROSEN, Joh. Gust. Ueber eine Flugschrift von 1743. (Academy Reprint.) Berlin : Dümmler.

FONTES RERUM BOHEMICARUM. Tom. I. Vitae Sanctorum. Fasc. 3. Prag : Grégr u. Dattel.

FREEMAN, E. A. General Sketch of European History. Macmillan.

FRIND, Canon. Ant. Die Kirchengeschichte Böhmens im Allgemeinen u. m. besond. Beziehg. auf die jetzige Leitmeritzer Diöcese. Nach den verlässigsten Quellen bearb. 3. Bd. Die Kirchengeschichte Böhmens in der Husitenzeit. Mit e. Copie der Karte Böhmens v. Nic. Claudianus. Prag : Tempsky.

GÄDEKE, A. Das Tagebuch d. Grafen Ferd. Bonaventura v. Harrach während seines Aufenthaltes am spanischen Hofe in den Jahren 1697-1698. Wien : Gerold's Sohn.

HUTZELMANN, Dr. Christ. Angriffe Frankreichs auf Elsass u. Lothringen. Ein Beitrag zur Geschichte dieser beiden Reichslande. Nürnberg : J. L. Schmid.

LECHLER, G. V. Johanna Wicif und die Urgeschichte der Reformation. Leipzig : Fleischer.

REGESTA DIPLOMATICA nec non Epistolaria Bohemiae et Moraviae. Pars II. Ann. 1253-1310. Opera Ph. D. Josephi Emmer. Vol. I. Prag : Grégr u. Dattel.

RELIQUIAE TABB. TERRAE REGNI BOHEMIAE anno MDXII igne consumpt. Ed. J. Joseph. Emmer. Tom. II. Prag : Grégr u. Dattel.

WIESELER, F. Commentatio de vario usu tridentis apud Populos vett. imprimis ap. Graecos et Romanos. Göttingen : Dietrich.

Philology.

Dr. Volkmann's Greek and Roman Rhetorica. [Die Rhetorik der Griechen und Römer. In systematischer Uebersicht dargestellt von Dr. Richard Volkmann, Gymnasial-Director in Jauer.] Berlin : H. Ebeling and C. Phahn.

THE very importance of Technical Rhetoric for the ancients has in one way interfered with modern appreciation of their work in that field. For at least six centuries after Aristotle the theory of Rhetoric went on being elaborated or refined. Its place in a liberal education and its bearing on practical life not only drew to it a host of special students, but led men who took all knowledge for their province to feel at least a condescending interest in its development. "It is base to be silent, and let Isokrates talk." A few leading principles of Rhetoric were early seen, and the ground-plan of an art was laid down; but, when this had been done, an enormous amount of ingenuity and acuteness continued to be spent in stating and re-stating these principles from new points of view, in dividing and subdividing the ground according to new schemes, in devising new and more subtle terminologies. "The ancient Rhetoric," says Dr. Volkmann, "is no capricious medley of unmeaning, pedantic rules, but a system in the highest degree simple and convenient, . . . clear, and easy to survey." This is true in the sense that a few general conceptions may be traced in different forms through all the technical writings, and that (as Dr. Volkmann's book proves) it is possible to give the net result of these writings in a compact shape. But on the other hand it can hardly be denied that the principles of ancient Rhetoric came to be overlaid by a mass of rules and technicalities which may fairly be called pedantic—the result of ingenuity accumulated where exactness was impossible. Ernesti's lexicons, books on special periods such as Spengel's Συναγωγὴ Τεχνῶν, or commentaries on individual technicists, have hitherto been the chief helps for students of the subject. Following up his work published in 1865, *Hermagoras; or the Elements of Rhetoric*, Dr. Volkmann gives in his present book a complete digest of Greek and Roman Rhetoric.

He has not brought into special prominence any one authority or group of authorities, or any one period, but has sought to reduce under certain heads the entire lore of the subject. He takes like account (for instance) of Anaximenes and Aristotle in the earlier age, of Cicero and Quintilian in the middle, of Hermogenes and Apsines in the later. His book is a handbook, serving two purposes—the interpretation of the technicists and the illustration of the orators.

The difficulty of such an attempt consists first of all in this, that the systems of different writers vary not merely in details but also in the manner of viewing or applying principles and in the partition of the whole field of Rhetoric. For instance, Aristotle made the provinces of Rhetoric to be Invention, Expression, and Arrangement. Theophrastus added Delivery (*ὑπόκρισις*). Mnemonics come in as a fifth part in later systems. The doctrine of the *στάσεις* is limited by some writers to "causes" (*ὑποθέσεις*), extended by others to theses; the general topics of the enthymeme are classified on several radically different plans. Dr. Volkmann's method in such cases is to give a prefatory notice of the various different arrangements, and then to take for closer treatment and illustration the arrangement which he thinks best. His book, then, is much more than a compilation: it is an effort to bring out of systems differing in more or less important respects the ground-ideas common to all; to set these in the clearest light; and to illustrate them by examples. He disposes his materials under five heads: 1. Invention; 2. Arrangement; 3. Expression; 4. Memory; 5. Delivery—the province of Invention being subdivided as it concerns Forensic, Deliberative, or Epideictic speaking.

The first special point to be noticed in Dr. Volkmann's book is his explanation and analysis of the *στάσεις* (pp. 23-63). His original and peculiar merit here consists in the clearness with which he points out the one great source of confusions and discrepancies in the technical writers on this subject. The elements of the *στάσεις*, the *constitutio* or *status causæ*, are an affirmation and a denial: the *στάσεις* is the question at issue as it arises on the first conflict of opposite assumptions. Hence it is only a forensic speech which can properly be said to have a *status*, and this *status* is always determined by the accused, never by the accuser. A deliberative or epideictic speech cannot properly be said to have a *status*, since there is no need to "constitute" at the outset the question under discussion. Most of the ancient writers on Rhetoric missed this distinction. Cicero and Quintilian give a *status* to every *quaestio civilis*, deliberative or epideictic as well as forensic, and so Hermogenes to his πολιτικὰ ζητήματα. Again, Dr. Volkmann shows very well how the classification of *στάσεις* is not a barren pedantry, but has a direct practical use for the criticism of oratory. By way of example, he defines the *στάσεις στοχαστική* in the speech of Demosthenes *De Falsa Legatione*; and then, applying this definition, estimates the comparative merits of the speech as an argument and as a work of art.

His account of the rhetorical syllogism and of the technical terms connected with it is another instance of clear and concise statement. "Enthymeme," as he says, was originally the general name for the rhetorical syllogism, whether formally complete (*i.e.* consisting of three propositions) or incomplete; but as the rhetorical syllogism is often incomplete, the enthymeme came, after Aristotle's time, to be defined simply as a shortened syllogism (*e.g.* Quint. v. 10, § 3); and then "epicheireme" became the term for the complete, as opposed to the incomplete, rhetorical syllogism. It might have been worth while, in illustration of this, to have referred to Aristotle's statement (*Rhet.* i. 2) that the enthymeme is a syllogism ἐξ ὀλίγων τε καὶ πολλάκις ἐξ ἑλα-

τόνων ἡ ἐξ ὁ πρῶτος συλλογισμός. The *πολλάκις* here seems often to have puzzled commentators who had in mind the *later* definition of the enthymeme as a shortened syllogism. This may be seen by looking at a note on the passage in Parsons' commentary (Oxford, 1836), where it is suggested that *ἐλαττόνων* possibly refers to the *number of words* in which the enthymeme is stated.

In the second division of his book, Dr. Volkmann notices the comparative neglect of Arrangement by the technicians. Invention or Expression were at first the only recognised provinces; and even Aristotle, though professing to treat Arrangement separately (*Rh.* iii. cc. 13-19), virtually leaves the province of Invention only in one part of c. 17. Dr. Volkmann takes the *οἰνορομία* of Dionysius as the basis of this part of his work, and examines it under its three subdivisions—(a) *τέχνη* proper—general rules about the marshalling of arguments; (b) *διάπερις*,—a minute analysis of the varieties of each *status causae*; (c) *ἐξεργασία*—the elaboration of proofs, for which Dr. Volkmann refers back to the sections on the *ἐντεχνού πίστεις* (pp. 207, f.).

In the third division of the book—that relating to Expression—Dr. Volkmann has achieved the formidable task of defining and illustrating the principal tropes and figures known to ancient Rhetoric; and has stated clearly the essential difference, often overlooked, between *τρόπος* and *οὐχίμα*: the trope is concerned with particular words used in an abnormal sense; the figure is concerned with groups of words used in their normal sense for the artificial expression of a thought: so that—according to a neat saying quoted by Dr. Volkmann from one of the late rhetoricians—a trope is to a figure as a barbarism to a solecism.

The special difficulty of Dr. Volkmann's task lay in its first part, the topic of Invention: it is here that his grasp of the whole subject is best seen, and that the help which he gives is worth most. But the other parts have been worked out with no less care and thoroughness. The book is what it aims at being, and what did not exist before—a complete handbook of Greek and Roman Rhetoric.

R. C. JEBB.

Conington's Persius. [Persius; with a Translation and Commentary by Conington.] Edited by H. Nettleship. Oxford: Clarendon Press Series.

In some respects this posthumous volume is even more delightful than the great edition of Vergil. The charm of that was the way in which the anxious delicacy of the editor reflected one whole side of Vergil which had never been adequately brought out before. But Vergil and the Vergilian literature are too extensive a subject to be presented as a whole at the present day, especially by a scholar so scrupulously thorough as Mr. Conington, who could never leave a line of investigation without exhausting it. Persius is not too vast to be studied on all sides, and Mr. Conington had enough in common with him to appreciate him, while his uniform suavity and sanity form a complementary contrast to the terse obscurities and the abrupt refinements of the poet of Volaterrae.

The introductory lecture on the life and writings of Persius brings together very pleasantly what is known of the satirist, with many ingenious *aperçus* on the origin and development of Roman satire. It may be a question whether, as Persius always writes in the tone of a man perfectly at ease under the imperial system, it was worth while to repeat *à propos* of Persius' stoicism the usual unsifted commonplaces about the antagonism of the porch to the empire; and—though it is undeniably plausible and

suggestive to compare Roman satire as an advance upon Greek comedy with the great progress achieved in general literature when prose detached itself from poetry—we could have wished the suggestion accompanied by an explicit acknowledgment that there are no grounds aesthetic or historical for placing Roman satire, or any other satire, on a level with Greek comedy; that the greater richness of content in comedy always must outweigh anything that has been gained in force in satire. Still the point is an interesting one, and Latin literature is so generally depreciated that it may have been better not to encumber the suggestion with reserves. Another suggestion which we hope to see carried further is that Persius was a deliberate and direct imitator not only of Horace, but of Lucilius.

The translation is simply admirable. Mr. Conington has kept all Persius' point and condensation, all his dry humour and his chastened geniality. He is sufficiently like him to give a triumphant answer to the question whether he is worth reading apart from his difficulties; and where he is unlike him, it is because he improves upon him, and attains to the uniform level of poignant refinement which Persius pursued through so much quaintness and affectation. Of course neither the translation nor the commentary are to be taken as representing the final views of the author, though the first thoughts of Professor Conington were riper than the third thoughts of many men. Perhaps the most ingenious new interpretations are on i. 85, which is connected with Hor. i. s. 10, 28, as follows: "Even the eloquence of the bar, to which Horace would point as a genuine unaffected thing, has caught the taint; even our Pediases talk like schoolboys and pedants;" and vi. 11: "So says Ennius' brain when he had been roused from dreaming himself Maeonides Quintus developed out of Pythagoras' peacock," as if Ennius called himself Homer in addition to his own name Quintus; as Mr. Conington points out, if the traditional explanation that Ennius was five transmigrations off the peacock were correct, we ought to have had *ab* instead of *ex*. The comment on i. 124, *Pallere Eupolidem*, which is explained as "pallere palorem Eupolideum," is certainly ingenious; but we hardly see why the analogy of *sabbata palles*, v. 184, should have been so emphatically rejected. Nor is the difficult passage, ii. 18-20, quite satisfactorily treated. The traditional reading and explanation were quite satisfactory from a literary point of view. "What is your view of Jupiter? Should you care now to put him above anybody?"—"Above whom?"—"Well, above Staius; why bear you any doubt about it? which of them is the most desirable judge, and the fittest guardian for a lot of orphan boys?" If this is rejected on the grounds that there is more MS. authority for "*cuinam?*"—"Cuinam?" than for "*cuiquam?*"—"Cuinam," and that no Roman poet could have used "*quis*" with a comparative for "which of the two;" it would surely be better to give v. 20 to the interlocutor that the connection might be, "Can you hesitate about putting Jupiter first?"—"Why, Staius is a most respectable man; who more so?"—"Well, then, if you have much confidence in him, go and tell him what you've just told Jupiter." On iii. 25, it is at least a question worth discussing whether *purum et sine labe salinum* is not to be compared with Juvenal, x. 19, *Pauca licet portes argenti vascula puri*, so that the sense would be, "You've a tidy little stock of corn and a tidy little salt-cellar, no chassing on it and no stain either." v. 33, *jam candidus umbo*, is translated, "the yet unsullied shield of my gown;" of course the *yet* is a license, not an oversight, but as the translation was in prose, it is to be wished that the commentary had indicated the fact for the benefit of tyros. vi. 64, *minus mihi* is not quite clearly explained in the commentary, and over-explained in the translation; the

sense surely is not, "I have robbed myself for myself," but, "the diminution only affects me"—[not you, who never possessed the undiminished total]. It is curious that none of the commentators have quoted from Aeschylus, Fr. 371, οἱ τε στέναγμοι τῶν πόνων ἐπείρησα, which is almost certainly directly or indirectly the original of i. 78, *Antiope aerumnis cor luctificabile fulta*.

It may seem ungracious to criticise what has evidently been a labour of love, but it is to be wished that in a second edition some errors of the press may be corrected, and one or two obvious incompletenesses either supplied or removed; e. g. vi. 11, we have the following: "Homer's revelations, however, turned on the doctrine of metempsychosis, he having been a peacock at one stage of the process (note on Prol. 3)"; where there is not a word about peacocks. Is it barely possible that Mr. Conington suspected an allusion to the fable of the daw and peacock at Prol. 13?

G. A. SIMCOX.

Vocabulary and Handbook of the Chinese Language. Romanised in the Mandarin Dialect. In Two Volumes. By Rev. Justus Doolittle. Vol. I. Foochow.

If the frequent appearance of Chinese dictionaries, vocabularies, and grammars be a proof of an increasing interest among European students in the language of China, it is certain that the taste must be fast developing. A few years ago the number of Chinese-English or Chinese-French dictionaries in existence might have been counted on the fingers of one hand; now as many are published each year. Some of these, as may be supposed, might, for all the practical good they are likely to be to students, as well have remained unpublished, but from most there is something new to be learned, and these will at least form valuable aids to the future compiler of the dictionary which will be to the students of the future what Morrison's great work has been to the past generation of learners. The work before us is undoubtedly entitled to a place in the latter category. The information it contains is considerable, and though exception might be taken to the somewhat loose style in which the materials are put together in its pages, it will doubtless prove itself to be of valuable assistance to beginners in Chinese. Its author has availed himself of the results of the labours of former workers in the same field, and has been able to supplement the matter furnished by them by a careful personal study of the language extending over many years. Mr. Doolittle divides his work into three parts. The first, the only one which is now before us, consists of the vocabulary proper, and is complete in itself. Its author tells us that it contains more than 175,000 Chinese characters in over 66,000 expressions from which all local phrases have been strictly excluded. The second part contains a number of clauses and phrases alphabetically arranged, relating to a large variety of subjects, among which are to be found many popular proverbial and classical expressions. And in the third part are collected lists and tables of terms and phrases contributed in answer to the invitation of the author by members of the consular and customs services, and missionaries, resident in China. Of this last part we can speak only from the information conveyed to us in the preface to his present volume, and if the plan there proposed be carefully carried out, the result will doubtless prove a great gain to students of the language. One great stumbling-block in the way of every learner of Chinese is the difficulty of acquiring a knowledge of the numerous varieties of style and expressions peculiar to the different branches of the literature. For instance, a student who had devoted his attention entirely to the Buddhist works of China would be sorely puzzled were he asked to translate

a passage from the writings of a classical author, and in like manner one conversant only with the latter style would be quite unqualified to render, at the moment, the meaning of a document written in the modern epistolary style. The advantage therefore of having a vocabulary which shall embrace terms and phrases variously common to the different styles is obvious.

The nature of the contents of this part of Mr. Doolittle's work will of necessity preserve it from one fault which, were we inclined to carp, we should find with the present volume; we mean the extreme redundancy of the common Chinese equivalents of the English words. For instance, under the heading "Day" and "Days," he gives us no fewer than twenty-two phrases, most of which might have been left to the intelligence of students enlightened by other pages of the vocabulary. This fault, however, is one of which beginners are not likely to complain.

ROBERT K. DOUGLAS.

Intelligence.

University College, London, has recently set an example which certain venerable but inert institutions in this country would do well to follow. The brochure (of 17 pages) before us contains three "Professorial Dissertations for 1871-72," written on the model of the German "Programmes," to which all serious students are so deeply indebted. The mathematical contribution of Professor Henrici, "On the Construction of Cardboard Models of Surfaces of the Second Order," cannot be more than mentioned here. Professor Robinson Ellis examines sundry passages in Propertius, and criticizes at some length the couplet ii. 2, 11-12: "Mercurio satis fertur Boebeidos undis Virgineum Brimo conposuisse latus"—where he pronounces the reading *satis* both metrically and historically defensible, though the harshness of the asyndeton leads him to conjecture *satuī*. Professor Key's discussion "On Latin Words commencing with an *F*, especially *ferrumen*, *ferruminare*, as standing in Lexicons," involves the interesting result that *ferrumen* (for this seems to be the true orthography) is immediately related to *fermentum*, as *tegumen* is to *tegmen*; and that the word was first used of the effervescent mass seen in the slaking of lime for the purpose of making mortar, and so came eventually to signify mortar. Let us add that some valuable remarks on Plautus are incidentally introduced.

In a meeting held some time ago by the leading Greeks of London under the presidency of Sir Peter Armeni Brails, the Greek ambassador, a considerable sum was subscribed towards the realisation of a plan highly honourable to the Greek nation. Committees have been formed at Marseilles and Paris for the purpose of conveying the remains of Adamantios Koraës, the founder of the present literary dialect of Greece, from Paris to the native soil of Hellas, and of reprinting and distributing his editions and works (which have now become very scarce). We consider the first part of this plan as an act of piety deserving of the greatest praise, but are even more rejoiced at the second part, which will be a benefit to the nation at large. We, however, wish that the committee should appoint a number of scholars, qualified to superintend the reprints of Koraës' editions, and that the results of modern criticism should be made available for these reprints. It would be an illusion to assume that the Koraës' editions of Isocrates, Strabo, and Plutarch, were absolutely perfect; nay, admirable as the notes are, the texts of these editions leave very much to be desired. It would not be wise to put into the hands of young studious Greeks *antiquated* texts of some of their best writers. The text of Koraës' original editions might be kept, but the deviations of the best critical editions of our time should be added in foot-notes, and brief discussions might elucidate the reasons and different merits of each reading. We hope that the committee will take this point into consideration, otherwise they will not be acting in the spirit of Koraës himself, who was a true scholar and critic, and who, could he return to the *κώνυμον* (as Aristophanes has it), would not claim for his works the halo of infallibility.

Mr. E. Legrand has recently added to his *Monuments pour servir à l'Étude de la Langue néohellénique* the "editio princeps" of the curious poem, *τερψ τοῦ γέροντος τοῦ φρούριου Μούρζακορεμένου*, in 384 trochaic lines, with a beginning in politic lines. The notes are excellent, and contain some valuable contributions by that excellent scholar Mr. George Wyndham, to whom we owe also a learned commentary on M. Legrand's second edition of the *Ιστορία Ταγίατιτρα*.

M. C. Sathas' *Μεσαιωνική Βιβλιοθήκη* has now progressed to the third volume. It will also contain a large mediaeval epic poem recently discovered at Trapezunt, and of which the poem entitled *H. Αναργύραποιος*

(Wagner's *Mediaeval Texts*, i. p. xxii, sqq.) turns out to be merely a fragment. The new discovery promises to be very important, the poem amounting to something like 3000 lines. M. Büdinger's conjecture as to the hero of the poem 'H' *Ayayvāpios*, can be shown to be quite unfounded.

Sanskrit Manuscripts.—Dr. G. Bühler has issued, for the Bombay Government, the second and third fasciculi of his *Catalogue of Sanskrit MSS.* from the private libraries of Gujarat, the former including 1339, the later 728, separate MSS. Of those of No. 2, 214 belong to the Purāṇas, among which appear the following new names: *Āditya*, *Auṣanasa*, *Kalki*, *Kṛpila*, *Chandra*, *Durvīsasa*, *Pṛtr̄ṣara*, *Puruṣottama*, *Mānava*, *Māheṣvara*, *Varuna*, *Saravat*, *Sāmba* and *Saura* Purāṇas. Next come 238 MSS. belonging to 78 different *Mahādyas*, many of which Dr. Bühler thinks will be useful for the student of the geography of Gujarat. The heading, "Rāmāyaṇa and Mahābhārata," includes 137 MSS.; "Artificial Poems," 252 MSS. The last-mentioned division includes many works made known for the first time by this list; though Dr. Bühler doubts whether any of the new discoveries will prove to be of any great importance, as they seem worthy to belong to the modern sectarian and court poets of Gujarat and the adjacent provinces. The chief value of the list, he thinks, will consist in the numerous old and very good MSS. of the great classical works, and of their commentaries. A complete exploration of the Jaina libraries may perhaps furnish some of the older poetical works which are now only known by name. A recovery of this kind was that of Bāṇa's *Chandikātaka*, noticed by Dr. Bühler in the *Indian Antiquary* of April last. The next division, "Dramatic Poetry," contains 125 MSS. of 36 different works; that of "Fables and Tales" includes 10 works in 39 MSS. Finally, there are 29 MSS. under the heading "Historical Poems and Pieces," among which Bāṇa's *Sriharshacharita* is important. The MS. breaks off in the eighth or last canto of the poem. The third part contains, on grammar, 139 MSS., including copies on most of the standard works, several works on *paribhāṣhas*, Hemachandra's *Dhātupāṭhāyaṇa*, &c.; 49 MSS. of *koshas* and their commentaries; 89 MSS. on rhetoric; 32 MSS. on metrics; and finally, 419 MSS. on Hindu law. We hope that the plan of more detailed notices of these MSS. to be published as soon as the survey is concluded, has not been abandoned by the Bombay authorities.

Bābū Rājendralālā Mitra has likewise printed, for the Bengal Government, a new number, the fourth, of his *Notices of Sanskrit MSS.* Of *Vaidic* works, it includes accounts of MSS. of the *Māṣaka Kalpa Sūtra* of the *Sāmaṇeva* (No. 654), with the greater part of a comment by *Varadarāja* (No. 664); a commentary, by Anārtiya, on the *Sākhāyana Kalpa Sūtra* (No. 665); the *Baudhāyaṇa* and *Apastamba Śilvaśātras* (Nos. 655 and 657), the former with a gloss by Dvārakānātha (No. 666); Kātyāyana's *Gṛihyaśātra* (No. 658), and an *Āpastambhya Gārhya-karmaprayoga* (No. 662);—on rhetoric, Jayadeva's *Chandrāloka* (No. 605), and Nyāyavāgīsa's *Kṛtyachandrikā* (No. 639);—further, a MS. of the *Rājāvalī* (No. 559), and an incomplete one of a *Prākṛit* Grammar (No. 551), different from those hitherto known;—also Kamalākarabhaṭṭa's *Sādradharmatattva* (No. 607), and Halāyudha's *Brāhmaṇasarvasva* (No. 652).

Mr. Childers supplements his review of M. Fausböll's *Ten Yātakas* (*supra*, pp. 381–383) with the following philological remarks:—Some of M. Fausböll's notes are, I think, open to criticism. Thus he seems to have misunderstood the phrase *chandādvasesa agantvā* (see p. 88), which as it stands is correct and offers no difficulty. By *chandāḍi* are meant the four *agati*'s, *chhanda*, *dosa*, *moha*, *bhaya*; and *chandādvasesa agantvā* merely means, "not walking under the influence of the four evil passions, desire, anger, error, and fear." M. Fausböll finds fault with my identification of *aṭṭa*, "a lawsuit," with अट्टः: he observes that अट्टः usually becomes *attha*, and asks why the aspiration has been dropped. But there is really nothing singular in this: अट्टः becomes *attha* when it means "thing" or "cause," and *aṭṭa* when it means "lawsuit;" just in the same way that वट्टः becomes *vattati* when it means "to be," and *vattati* when it means "to behave," or that अन्यत्र becomes *aññattha* when it means "elsewhere," and *aññatra* when it means "except." As to the loss of the aspirate, it has numerous analogies, as, for instance, *nandī* = नन्दी, *loddā* = लोद्दा, *majjhato* = मध्यस्त्. My explanation of *bhane* (p. 100) does not admit of any doubt, and so far from being in any way equivalent to *bhante*, it is a familiar expression generally used by a superior to an inferior. The only possible objection to my identification of *chhāta* with चात् (p. 96) is the difference of meaning, and this has little weight when we consider the innumerable cases in which a word has a different meaning in Sanskrit and in Pali. M. Fausböll

would refer *chhāta* to चात्; and in an elaborate note he denies the identity of चायति with *jhāyati*, "to waste away, to be consumed, to burn," and traces *jhāyati* and *jhāpeti* to दूर्; through the supposed causative forms *d(a)hyayati* and *d(a)hyāpayati*. But, in the first place, the Pali *jhāyati* is not a causative, since it means "to be consumed;" secondly, *dhāyati*, as M. Fausböll admits, does not account for the long *d*; and, thirdly, the fact that *jhāma* = चात् is the participle of the perfect passive from *jhāyati* conclusively proves that Böllensen is right in referring *jhāyati* to चात्. The causative *jhāpeti* is clearly identical with the Sanskrit चापयति, from चात् or चित्. The objection that it would be the only instance of च्छ becoming *jh* in Pali is not really a serious one, for we know that an initial च्छ always becomes *s* in Pali except in the two words चात् and चात्, which become *chhava* and *chhāpa* respectively. Finally, I may observe that the pres. pass. दूरते is in common use in Pali under the form *dayhati*, and that the original meaning of *jhāyati* is "to waste away," as will be seen from *Dhammapada*, verse 155. The note on *tappeti*, "to scorch" (p. 94), is interesting, and the explanation I believe to be correct: parallel instances are found in the coexistence of the forms *jānu* and *jannu*, *kapāla* and *kapalla*, &c. The form *ninnadda* = निनाद (p. 94) is explained by the fact that the prepositions नि and निस् are to a certain extent interchangeable in Pali: compare *nibuddha* = नियुक्त. *Nāguttā* (p. 99) undoubtedly represents the Sanskrit लाङुल, but with a termination स्य instead of त्तु: compare लाङुल with लाङ्गुल. *Sindhava* (p. 106) is certainly सैन्धव; in Pali *vṛiddhi* is frequently omitted before a double consonant: compare *mandabba* = माण्डव्य, *suttika* = सौतिक, *buddha* = बौद्ध, *muggarika* = बौद्धरिक.

Sig. Lasinio, of Pisa, is bringing out an accurate edition of the "middle comment" of Averroes on the *Poetics* of Aristotle. The Hebrew translation, by Tōdrōs Tōdrōsā (fourteenth century), forming the second part, has already appeared. The first part is to contain the Arabic original; the third, the general introduction, the two Latin translations, and an Italian one by the editor. It seems that the quotations from the Hebrew given by Eichhorn in his *Bibliothek*, vol. vii., were full of inaccuracies.

Contents of the Journals.

The Indian Antiquary, part vii. (July).—Popular Tamil Poetry; by R. C. Caldwell. Second paper. [Kamban's version of the *Rāmāyaṇa*, which Beschi so successfully imitated in his *Tembāvani*, is perhaps the most popular poem with Tamilians, although, when sung to a crowd in bazaars by wandering minstrels, it requires a running commentary to explain the meaning of the verses as they are recited. The works of the great poetess Auveiyar (probably in the tenth century) contain perhaps the oldest specimens of Tamil popular poetry extant, and they are written in clear pure Tamil. She is chiefly noted for her unrivalled collection of brief moral aphorisms. Another poem, the *Mudurei*, occupies a foremost place in Tamil literature. It has been assigned to Auveiyar but for one, may be spurious, stanza, in which the turkey is mentioned, a bird introduced into India by the Portuguese about three hundred years ago. Some of Pattanattu Pillai's writings rise to the level of Sivavakkiyar, but as a whole they are characterized more by melodious verbiage than striking thought. The *Sittar* (Siddha) school, the poetical quietists of the Tamil country, have furnished some pretty poems. Another favourite poem, especially with women, is the *Vṛeṭha Chintāmani*, a comparatively modern production.]—On the Gauli Raj in Khandesh and the Central Provinces; by W. F. Sinclair. [The writer conjectures that Gauli was the surname of a family of princes (and not of a nation) of Aryan race, who established themselves in the valleys of the Tapti and Narmadā during the great migration southward, which ended in the colonization of the Dekhan by the Aryan Marathas.]—An Inscription at Salotgi in the Kalādgī District, dated Śaka 867, or A.D. 945, with Remarks; by Shankar Pandurang Pandit. [This inscription, of which a facsimile is given, is in Devanagari, engraved on three sides of a stone pillar. Beneath the Sanskrit inscription there is another independent inscription in the Hale Canarese, likewise recording a grant of land by a Mahāmāṇḍaleśvara. The village lies south of the Bhīmā and Solapur. The grant was issued during the reign of the Rāshtrakūṭa king Krishnarāja, surnamed Akālavarsa, son of Amoghavarsha, residing at Māṇyakheta. The writer identifies

this king with the twelfth king in the list recorded on the Kardā plate, and refutes Wilson's suggestion as to there having been two collateral branches of the Kāshtrakūṭa Yādavas.]—Folklore of Orissa; by J. Beames. [Continued. A spell for snakes.]—Legend of the Origin of the Tungabhadra River; by V. N. N. [From the *Bhāvishyottara Purāṇa*.]—The Sacred Fire of the Pārsis at Udwāṭā; by W. Ramsay. [Account of the old Dastur or chief priest of the place as to how the sacred flame was first set up by the Pārsis after their flight from their country to the Konkan. Also a translation of sixteen Sanskrit ślokas, in which their Mobeds are said to have explained their religion to the Rājā when they landed in the kingdom of Sanjān, in the early part of the eighth century.]—Notes on the Rasakallola, an ancient Oriya poem; by J. Beames. [This poem, the most popular in Orissa, was composed by Din Krishṇa Dās, a Vaishṇava at the great temple of Jagannāth at Puri, who probably lived in the latter part of the fifteenth century. The poem consists of 32 cantos, or about 4000 lines, each beginning with the letter *k*, and treats of Krishna's life and adventures.]—Bengali Folklore; by G. H. Damant. [Continued. Legends from Dinajpur.]—Rock Inscription in Ganjam District. [From the *Proceedings* of the Madras Government, with a note by R. G. Bhandarkar.]—Asiatic Societies.—Review (favourable) of the Rev. A. Boutelou's *Philosophia Indica Expositio*, Bangalore, 1868.—Miscellanea, &c. [Tipera and Chittagong Kukis.—The Trivyar Festival.—Note on the root "tap"; by J. Beames.—Derivation of "elephant" from Dravidian *āne* or *āle*, the elephant, and Sanskrit *airavata*; by F. Kittel.]—Part viii. (August).—The Oldest known South Indian Alphabet; by A. C. Burnell. [The alphabet referred to is that used in three Tamil-Malayalam copper inscriptions in possession of the Jews and Syrians at Cochin. The two oldest are those by which these two communities were originally established. That of the Syrians Mr. Burnell supposes to be engraved in A.D. 774; none of the three being probably later than the early part of the ninth century. This alphabet is said to have once been used throughout the Tamil and Malayalam country, but chiefly in the extreme south. Mr. Burnell derives it from Egypt through the Phoenicians, and maintains the Pāli alphabet of Aśoka's edicts to be nothing more than an extension of this alphabet.]—Sketches of Mathurā; by F. S. Growse. [Continued. Account of Gobardhan, a famous place of Hindu pilgrimage, fifteen miles to the west of Mathurā.]—On the Dravidian Element in Sanskrit Dictionaries; by the Rev. F. Kittel. [List of supposed Dravidian words that occur in Sanskrit dictionaries under the letters *a* and *ā*.]—On the *Rāmāyaṇa*; translated, from the German of A. Weber, by the Rev. D. C. Boyd. [Continued. The essay endeavours to show that the plot underlying the *Iliad* was known to the author of the Sanskrit epic.]—Archaeology in Bombay Presidency; extract from the Administration Report for 1870-71.—Asiatic Societies.—Correspondence. [Age of Indian Caves and Temples.—Note on the Gauli Rāj.—The Khajuna language.]

Journal of the American Oriental Society, vol. x. No. 1.—Vocabulary of the Ponape Dialect, Ponape-English and English-Ponape, with a Grammatical Sketch; by Rev. L. H. Gulick. [Ponape, also called Ascension Island, is one of the Caroline or West Micronesian Islands. Its population in 1856 was supposed to be about 5000, and is divided into five tribes: Metalanim, Kiti, Wanega, Nut, and Jekooj. The language is said to have decided affinities with those of islands to the west.]—Thirteen Inedited Letters from Sir William Jones to Mr. (afterwards Sir) Charles Wilkins; communicated by F. Hall.—Brief Grammar and Vocabulary of the Kurdish Language of the Hakari District; by the late Rev. S. A. Rhea. [Rhea arrived in Kurdistan as missionary in 1851, and established himself among the Nestorians of the Kurdish mountains at Memikan, a village of the mountain-plain of Gawar, where he remained till April 1859, when ill-health drove him home. On his return to the Nestorian country in October 1860, he remained at Ordumiah, where he died in September 1865. The dialect here treated is that of Hakari, or of the tribes which formed the late principality of Julemerk, the southern portion of the present pashalik of Van. The Kurds of this district may number about 200,000, and are divided into a variety of tribes. Besides, nearly all the Nestorians know the language. The Harput dialect being the western, and the Senna the south-eastern, that of Hakari is the central and probably the one least adulterated with foreign elements.]—Collation of a Second MS. of the *Atharva-veda Prātiśikhya*; by W. D. Whitney. [This important work was published by Professor Whitney in 1862, from a single somewhat defective and very incorrect MS. The new MS. now collated has recently been acquired for the Bombay Government by Dr. G. Bühler.]—On a Karen Inscription Plate; by Rev. A. Bunker. [The writer visited Karen from Toungoo, accompanied by the Rev. J. B. Vinton, of the Rangoon mission, in 1868, especially for the purpose of seeing, and, if possible, copying, the famous plate. This feat they accomplished, though the plate was anxiously guarded by the chief, and even worshipped by the people. As they were not allowed to take wax impressions, they copied it each for himself. A lithographed copy is here given. The writer has not been able to decipher the inscription.]—The Pāli Language from a Burmese point of view; by Rev. F. Mason. [Endeavours to prove that, for a correct knowledge of Pāli and especially

the spelling of Pāli words, Burmese MSS. are no less, perhaps even more, valuable than Singalese. Though Pāli is studied by the scholars of Ceylon almost as their native tongue, still Ceylon has been dependent for the last two centuries on Burmah for the best Pāli MSS., as is proved by Ceylonese scholars themselves, and several important works which were not to be found in Ceylon have been rescued from Burmese MSS.]—Traces of Glacial Action on the Flank of Mount Lebanon; by Rev. W. M. Thomson.—On the Comparative Antiquity of the Sinaitic and Vatican MSS. of the Greek Bible; by E. Abbot (see *Academy*, vol. iii. p. 351).—Proceedings.

Zeitschrift der deutsch. morgantl. Gesellschaft (vol. xxvi. Nos. 1 and 2).—The Assyrio-Babylonian Cuneiform Inscriptions; by E. Schrader. [Contains not only an elaborate summary and justification of the method and results of Assyriology, but a short grammar of the language.]—New Moabitish discoveries and enigmas; by K. Schlottmann. [A description of the curious clay-vessels, &c., said to have been found in Moab, on the authority of the sketches and copies of Herr Weser, pastor at Jerusalem, with discussion of the inscriptions. Schlottmann inclines to believe in their authenticity.]

Gött. gel. Anz., No. 33.—Enting's *Punic Stories*; rev. by Nöldeke.—No. 37.—Driver's edition of Ben Shesheth on Jeremiah and Ezekiel; by H. E.—No. 40.—Transactions of the Society of Biblical Archaeology; by H. E. [Draws especial attention to the valuable papers of Dr. Birch on a hieroglyphic tablet of Alexander, son of Alexander the Great, and of Messrs. Lang and Smith on Cypriote inscriptions.]

Zeitschr. f. Völkerpsychologie und Sprachwissenschaft, vol. vii. No. 4.—Recent History of the Science of Language; by G. Lefmann. [I. Leibnitz. II. Dutch and German schools of philologists. III. The question of the origin of language.]—Syntactic Gleanings from the Classical Old Indian; by F. Misteli.—The Dual in Semitic; by Th. Nöldeke. [The Hebrew use of the dual, to denote things which go in pairs, more original than the Arabic.]—On *bona fide*, according to the Roman and Prussian law of land; by Baron.—Reviews: Gerber's *Die Sprache als Kunst*; by Tobler.—Lübbert's *Die Syntax von quom*; by Holzmann. [The best part of the book, the examination of the temporal clauses in Plautus.]—Zschokke's *Arabic Grammar*; by Wetzstein. [A favourable review, with many facts of interest to the student of dialects.]—Brücke's *On the Physiological Basis of the Modern High-German Verse*; by Steinthal.—Steub's *Die überdeutschen Familiennamen*; by Steinthal.

New Publications.

BURCKHARDT, F. Der Gothische Conjunctiv verglichen mit den entsprechenden Modis des neutestamentlichen Griechisch. Zschopau: Raschke.

CHWOLSON, D. Die Semitischen Völker. Versuch einer Charakteristik. Berlin: F. Duncker.

FAIDHERBE, Le Général. Inscriptions numidiques. Réponse à Dr. Judas. Lille: Imp. Danel.

FINZI, Fel. Ricerche per lo studio dell' antichità assira. Turin: Loescher.

GEIGER, L. Ursprung u. Entwicklung der menschl. Sprache u. Vernunft. Bd. 2. Stuttgart: Cotta.

LANE, E. Arabic-English Lexicon. Book I. Part IV. (Reprinted.) Williams and Norgate.

MARTIN, E. Examen critique des MSS. du Roman de Renart. Bâle: Schweighauser.

PENTATEUCHUS SAMARITANUS ed. et varias lect. adscritpsit H. Petermann. Fasc. 1: Genesis. Berlin: Möser.

STOLL, Prof. H. W. Die Götter u. Helden d. classischen Alterthums. Populäre Mythologie der Griechen und Römer. 2 Bände. 4. Aufl. Leipzig: Teubner.

WESTPHAL, R. Methodische Grammatik der Griechischen Sprache. 2. Thl. 1. Abth. Mauke: Jena.

WRAMPELMAYER, H. Codex Wolfsbuttelanus No. 205 olim Helmstadiensis No. 304 primum ad complures quas continet Ciceronis orationes collatus. Pars I. Hannover: Schmoll u. von Seefeld.

WUTTKE, H. Geschichte der Schrift und des Schriftthums. Bd. 1. Leipzig: Fleischer.

ERRATA IN No. 57.

- Page 365, col. 2, line 4, for "discourse" read "discourses."
 " 368, *Intelligence*, line 1, for "Palestine" read "Sinai."
 " 368, col. 2, line 6, after "Rönsch," read "and the *Historische Zeitschrift*."
 " 368, lines 24, 25, for "connected" read "corrected."
 " 368, line 42, for "Title" read "Tiele."
 " 368, line 17 from foot, for "Deighton, Bell, and Co." read "Williams and Norgate."
 .. 377, *New Publications*, for "PLAUTA" read "PLANTA."

THE ACADEMY.

"INTER SILVAS ACADEMI QUILEREM VERUM."

Vol. III.—No. 59.

Readers are reminded that the mention of New Books, Articles, &c., in our lists is intended as a guarantee of their importance. The Editor of THE ACADEMY cannot undertake to return communications which are not asked for. The Editor cannot reply to questions from authors respecting the notice of their books. The next number will be published on Friday, November 15, and Advertisements should be sent in by November 11.

General Literature.

Memoir of Count de Montalembert. By Mrs. Oliphant. Two Volumes. Blackwood and Sons.

THE Romantic movement had many sides; but perhaps its permanent significance is best expressed by saying that it was the idealisation of the growing-pains of a single generation. The young men who entered life when the storms of the revolutionary wars were clearing away had some excuse for believing, what all young men wish to believe, that the tiresome routine of existence was come to an end at last, that, after the world had passed through such an astounding series of crises, it never could settle down into the old ruts again, and jog along at the old humdrum rate. As the appalling fact became plain that life was going to be much the same as it always had been, as they found the world was too heavy to be lifted up to ideal heights on their shoulders, they had really no alternative (unless they would submit to be commonplace themselves) except to cry for the moon and the middle ages. *Le mal de René* became a fashionable complaint for the same reasons that René had become a fashionable hero. Society was weaker than in the eighteenth century, when it was still strong enough to turn at least one cold shoulder to Rousseau, and it was only the weakness of a corrupt society that made it possible for Rousseau, with his diseased craving for emotions, to become a power at all. The society of the restoration was purer than the society of the *ancien régime*, but this was not enough to compensate for the strength of traditions still unbroken; and there was another source of weakness which perhaps has not been sufficiently noticed. Napoleon, with all his hatred of *idéologues*, had rendered them an inestimable service by organizing all the higher education of France upon an uniform, systematic, compendious plan. A person who has been through such a course of instruction feels that he has exhausted the world as it is when he is still upon the threshold of actual life. He has had a summary of everything, and has nothing to wait for before making up his mind whether he will despair of it all or undertake to regenerate it upon any principle which happens to commend itself to him. Montalembert elected to regenerate the world instead of despairing of it; he was free from the diseased personality which coloured the pessimism of Rousseau, and in a lesser degree of Chateaubriand and Lamartine. His career might be taken as a model of healthy romanticism, or, if healthy romanticism is a contradiction in terms, it must be admitted that he lived a life of wholesome and deserved prosperity, though he tried men and things by a standard which no generation could have attained, and though his own generation came short of any standard by which an honourable

man could consent to try his contemporaries or to be tried himself.

His early life was passed in England under the care of his maternal grandfather, who consoled his declining years by expanding his Oriental memoirs into many folio volumes for the future edification of the young Montalembert, who seems to have been a model boy of the Miss Edgeworth type, with a very exalted estimate of the value of knowledge and a strong desire to reward his elders for their benefits by deserving their approbation. He seems to have been less comfortable when reclaimed by his own father, who interrupted his studies to take him to all manner of sights and ceremonies, of which his precocious gravity exaggerated the insignificance. At the age of twelve he made his brother, aged ten, swear everlasting fidelity to the charter of poor Louis XVIII.; one year later he gravely observed in his journal that the heroic fortitude of that monarch under his painful and lingering illness was worthy of the august author of the *Charte constitutionnelle*. At the Lycée of Sainte-Barbe, at the age of fifteen, he recorded his conviction, finally determined by the perusal of a work upon law, that England was the first country in the world; at seventeen, he and his friend, Cornudet, solemnly pledged themselves to one another to devote their lives thenceforward to God and their country. Montalembert was already exercised by the problem how he was to reconcile his ardent faith with his equally ardent patriotism. He left the *lycée* to his regret without a prize, apparently he had read too much and too widely to be able to produce anything empty enough to be finished. Immediately afterwards he had to join his father, who was ambassador in Sweden, and to enter into the gaieties, such as they were, of the society of Stockholm. His experience was not favourable. He concluded that society could only be amusing to those who were famous. A lady of his circle pronounced him *altier et pédant*, and it is probable that at least one-half the charge was not ill-founded. At this period he imagined that his serious mission in life, which these vexatious frivolities so unaccountably delayed, was to sit at the feet of O'Connell, the solitary Catholic patriot of the period, and write an immortal work upon Ireland. These plans were interrupted by the necessity of escorting his sister to a warmer climate, but to his great remorse she died upon the journey. On his return to Paris he published two articles on Sweden and Ireland; he seems never quite to have forgiven M. Guizot, then editor of the *Revue française*, for mutilating the former after he had consented to abridge it, though perhaps editors may sympathize with a *confrère* who shrank from publishing a sarcastic account of a king, by the son of an ambassador resident at his court.

Montalembert set off on the Irish expedition just in time to miss the fighting in July; he hurried back at once to serve his country; but his father felt that such enthusiasm was rather likely to compromise the family, and sent him back to complete his tour. He was enchanted with the Irish peasantry, and did poetical justice to the charms of Irish scenery; the only drawbacks to his enjoyment were that he could not settle which of Lord Donoughmore's daughters to fall in love with, and that he was disappointed in the Liberator, who, instead of fooling the young enthusiast to the top of his bent, turned him into a miscellaneous drawing-room to find his level and, as he naturally supposed, enjoy himself.

Mrs. Oliphant is probably right in supposing that in spite of this disenchantment the visit to Ireland determined Montalembert's career. The discovery that priests could act as demagogues among a fervently Catholic population seemed the entire solution of all difficulties as to how ardent Catholicism was to be reconciled with ardent patriotism. The solution might have been less satisfactory

if Montalembert had understood the harangues of the tribunes whom he venerated, and if his own patriotism had not been as aimless as it was ardent. He seems to have been sincerely under the impression that the principles of 1789 provided for all the legitimate needs of humanity, that the charter of 1814 was an adequate, though perhaps perfectible, embodiment of those principles (whence it followed that any infringement of the charter was to be regarded from a very transcendental point of view), that the consent of Parisian newspapers and *d fortiori* a successful insurrection in the streets of Paris were unmistakable declarations of the will of France, and that any government which a few resolute and dexterous men could manage to impose upon the insurgents was consecrated by the national choice. Perhaps one reason why parliamentary government has succeeded better in England than in France is that in England the series of fictions on which it reposes have been assumed without being stated, while in France those fictions have formed the favourite topics of parliamentary amplification and the favourite arena of parliamentary contests. Montalembert attempted to account for the difference in another way ; he imagined that public men in France had only to imitate their neighbours and practise the parliamentary virtues for two or three centuries : and imagined that this would compensate in the long run for the disadvantage of France in not possessing a secure and respected aristocracy. The fact is that in England the majority of the people have never been in such a bad condition as the majority of the French before 1789 : the material relief, with its legal conditions, which the people then gained partly through the fears of the government and the privileged classes and partly through their own violence was the one permanent result of the revolution. This is the reason why the majority of English electors are credulous and excitable and loyal, while the majority of French electors are jealous, sceptical, and apathetic, and the section which is not apathetic keeps the rest of society in a constant alarm by the irrepressible pretension to have the revolution established *en permanence* till it shall have accomplished as much for the floating population of the towns as for the settled population of the country. With the passions of this section Montalembert had not the slightest sympathy. He was quite sincere in his enthusiasm for liberty, partly because he liked to be left alone, partly because he had a haughty dislike for the seamy side of politics, for all the shabby and arbitrary things which it is necessary for a government to do that wishes to be strong in France, and, perhaps, in other countries. He was too generous not to exult in the abolition of all the tangible privileges which had once been so oppressively felt ; but he was neither too logical nor too imaginative to be surprised that anybody should find it difficult to accept the social inequalities which were the effects of those privileges, and had simply survived their causes, as a natural, not to say a beneficent, arrangement. Liberty and liberalism are large words ; and Montalembert was not alone in supposing that the particular side of a complex movement which aroused his individual enthusiasm was the side which ought to triumph ; and that nothing but blindness and prejudice could keep intelligent contemporaries from seeing the necessity of recognising this side as a preliminary to successfully repressing or suppressing the rest. It may be doubted, indeed, though he loved both liberalism and Catholicism ardently, whether he loved either quite disinterestedly as an end in itself ; whether both with him were not means and conditions of his ideal life. He was sufficiently attached to the liberty of the press to defend it when it menaced a dynasty, but he called for measures of repression when it had begun to threaten property. He desired

a liberty both of action and of teaching for the Catholic clergy which was utterly incompatible with the doctrinaire traditions of centralised administration ; but he never seems to have realised that the triumph of Catholicism implies the suppression of liberty of opinion ; he would sooner have seen other religions coexist for ever with his own than have exposed any respectable religionist to the slightest pressure of the secular arm. He never repented of the fundamental mistake of the *Avenir*, which was to suppose that Catholicism could ever unite itself to any system of temporal politics, and thereby give up the right of trading upon all in turn according to its own discretion and its own preferences.

When the *Avenir* was condemned, he submitted to the extent of believing, or at least of acting as if he believed, that its propaganda had been so rash as to be mischievous ; but his personal attachment to Lamennais, which Lacordaire seems not to have shared, made it difficult for him to disentangle himself from the last struggles of that imperious thinker, who at bottom disliked Catholicism too much to accept it himself when he could no longer impose it upon others by his own dialectic. The years that followed this collapse were pleasantly and fruitfully occupied, partly by his marriage and settlement at La Roche-en-Brény, partly by some amusingly eager protests against the vandalism which was destroying the ancient monuments which the revolution had spared, and partly by the romantic *Histoire de Sainte-Élisabeth*. This last is delightful in its fresh picturesque fervour, and has none of the unsatisfactory compromises with commonsense which we find in the *Monks of the West*, where the writer seems afraid of hazarding his personal belief beyond the point up to which it is required in the interests of his narrative. It is unnecessary to add that even from the author's theological standpoint the *History of St. Elizabeth* is at least as uncritical as the old chronicles of which the headings of the chapters indicate an ineffectual ambition to assimilate the form. On his return to public life he distinguished himself by impressive and impassioned pleadings on behalf of Poland, the Sonderbund (whose untimely extinction he attributed to the intrigues of Lord Palmerston), and by a persistent and ingenious agitation against the monopoly of the university in the higher education. He was never able to convince the majority of his own supporters of the importance of his subject ; and it may be doubted whether he did not fall to some extent into the mistake of confounding symptoms with causes. The teaching of religion at Oxford, forty years ago, was as perfunctory as it can have been in French *lycées*, but a young man's faith incurred no peril whatever by his passing through an university education, for the consent of educated opinion was still orthodox. Educated opinion in France has never really been reconverted since the days of Voltaire, himself a pupil of the Jesuits. Of course the claim to be educated outside the main current of educated opinion was perfectly legitimate, as such opinion did not claim to be infallible. Of course, also, the monopoly of the university helped to confine thought to a series of sterile oscillations between Condillac and Descartes. It is doubtful, however, whether much was really gained for Catholicism by disqualifying some hundreds or some thousands of young men for entering with sympathy into any profession but that of Papal Zouaves, or by passing as many Parisian *gamins* as possible through the hands of religious congregations, with no very perceptible effect in diminishing the ranks of the Commune.

After the revolution Montalembert occupied a position of considerable practical importance in the two reactionary assemblies which the peasantry sent up to punish Paris for

surprising them into a republic. He voted for all the repressive measures that were carried, and for some, like the proposal to establish a second chamber, which were not ; towards the close of the republic he lost the confidence of his own party by showing a desire to conciliate rather than humiliate the doctrinaire section of the conservatives in the settlement of the education question. It is possible that M. Veuillot may have been wrong in his estimate of Montalembert's policy ; but his polemical instinct did not betray him in his estimate of the temper of the fellow-labourer he disowned. Perhaps the irresponsible isolation into which Montalembert was thrown by the settlement of the question to which he had devoted himself may have had something to do with the naïve pertinacity with which he clung, even after the *coup d'état*, to the belief that the prince-president was the tool of the party of order, and had no desire to make the party of order his tool. When he was finally undeceived by the confiscation of the Orleans property, he naturally became the most bitter and disdainful of the anti-imperialists ; and he had a magnificent opportunity of insulting the government in a dignified way when it made the mistake of prosecuting him for his exaggerated panegyric on our method of managing Indian affairs. After this he appeared twice in public : once as the advocate of Poland, and once at Malines to inculcate the fascinating and unmeaning formula of a "Free Church in a Free State." But the greater part of his later years were spent in carrying on his colossal work on Monasticism, amid increasing physical infirmities. The preparations for the Vatican Council alarmed and disgusted him as well as other Catholics, who had hoped too much from their schemes of reforming the world on Catholic principles, to be quite ready to sacrifice this world to the next ; but it appears, from some naïve expressions in his last illness, which Mrs. Oliphant has recorded, that, when the definition came, he would have made the same half-submission as he did in the case of the *Avenir*, and with the same boyish good faith.

Mrs. Oliphant has been too anxious to explain her hero to exhibit him quite so fully as might be wished ; we cannot help thinking that even at some expense to his dignity, in the earlier part of the life, he might have been allowed to speak more for himself, and regretting that the time has not yet come for biographers to speak of the idyll of his marriage. Still, with these drawbacks, she has given a fairly complete and highly interesting picture of a high-souled and accomplished gentleman, whose eloquence, earnestness, and unselfishness, gave him a much higher rank in his own country than they would have given him in ours, which he envied and admired so much.

G. A. SIMCOX.

Wergeland's Selected Works. [Udvalgte Skrifter af Henrik Wergeland. Udgivne af H. Lassen.] Copenhagen : Gad.

MR. LASSEN deserves the thanks of all Norwegian students for this convenient selection in one compact volume. Hitherto Wergeland has only been accessible in the great standard edition of his poetical and dramatic works, nine ponderous tomes, and his prose writings have never been collected at all. Of the present work the first 350 pages are occupied with the poet's best verses, and it is only with these that we care to deal. Wergeland's pamphlets and histories, novels and biographies, can scarcely be read out of Christiania. This man combined in himself the characteristics of a divine poet and a local stump orator, and his achievements in the latter line were apt to be deplorable.

The book begins with an ode, *Til Norges Frihed* ("To Norway's Freedom"), in very bad sapphics, published, when the writer was sixteen, in the omnivorous journal

Morgenbladet, now a most respectable and even venerable newspaper, but in those days, 1826, still very young and silly. "Norway's Freedom" itself was very young, and Christiania had not yet settled into a capital of Europe at all decidedly. "The wonder was not yet quite gone" from her so long provincial eyes, albeit her day had counted as ten years. It was so new, so strange to be the centre of an independent kingdom ; who can doubt that Dublin would receive metropolitan honours with long-continuing agitation ? and Christiania had been the Dublin of the Danish dominions. Everybody went mad over the new liberty, and the journalism of the first fifteen years of independence is quite a curiosity of literature. A new kind of poetry was invented to form a safety-valve for so much excitement, *Syttenmaiøesi*, or poetry for the 17th of May, the anniversary of the crowning of King Christian by the Storthing, and Wergeland's ode is a beautiful specimen of this sort of composition. Hardly anything so tawdry, so wearisome, so unreal, has ever been foisted on human attention as the pamphlets and poems of Norwegian independence. A sketch of this literature would form a curious chapter for Dr. Forbes Winslow's celebrated work on the *Obscure Diseases of the Brain*.

Wergeland was an emanation from the very centre of this society. Born in 1808, he was six years old when his father went to Eidsvold to be a member of the infant Storthing, and he must have fed upon brochures, as other baby-poets feed on fairy-tales and folk-songs. In him the *Syttenmaiøesi* culminated, and, before his death, decayed and disappeared. It is impossible to help thinking that Mr. Hartvig Lassen might have given us less of this rubbish ; there are a great many verses in the earlier part of the volume that have nothing but their fine versification to put forward as a claim to immortality. The best of them are those which have reference to republican leaders and dogmas in foreign countries, to Liberty in England and France. Perhaps the very best is an ode, dated 1836, on the death of Rouget de l'Isle, who embraced the virginal muse but once, and begat a god. The sonorous march of the verse in this elegy is worthy of the men who went singing through the land that they might die for Liberty. But most of the political poems of Wergeland are turbid and shallow, and his ideas reach no farther than Rousseau ; he wrote in 1840 like a Girondin of 1792 ; his whole life was an anachronism.

Wergeland was a much better poet than Southey ; he was a much worse poet than Shelley, but he combined several characteristics of these two men. He surpassed the former in copiousness, if that be possible, and he had the same fondness for strange and unwieldy themes ; he was consumed, too, with the desire of writing epics. On the Shelleyan side of his genius, he was a fantastic and original lyrist, republican, unpractical, unworldly, desirous of solving the world's enigma in choral dramas. He had the same love for ghastly objects, the same rather morbid fondness for the horrible, that Shelley had. There is a poem in this volume, *Pigen paa Anatomiakammeret*, ("The Girl in the Dissecting-room"), that would have delighted the author of the last part of the *Sensitive Plant*. But Shelley in his happier moments was as ethereal, as white as the translucent air of morning, while Wergeland, even where he shows most power, is always lurid and distorted, and of the colour of a thunder-cloud. He is the most English of all Scandinavian poets ; not only does he exhibit, in a hundred places, a fondness for English thoughts and habits that amounts to Anglomania, but his style and the character of his writing is more allied to our own than that of any other Northern poet. The Scandinavian scalds eschew metaphysics, but Wergeland

constantly weaves together profound thoughts in his own wild way; instead, too, of the limpid flow of fancy that the Norwegians are accustomed to, this poet festoons his poems with rich and redundant imagery, like an Italian or an Englishman of the more florid order.

When he was twenty-two, Wergeland wrote a drama that covered 700 pages with closely printed verse. This production he designed to be "an epic of the human race and a Bible to republicans." It takes the same place in his literary history that *Queen Mab* does in Shelley's. In a late work by the editor of this selection, *H. Wergeland og hans Samtid* ("Wergeland and his Contemporaries"), we have some curious letters and thoughts belonging to this period, that show how completely uncritical and unsound the author's views on poetry were. There must be something very wrong with a poet's mind when he writes an epic of the human race in 20,000 verses; and had not Wergeland by singular good-fortune met with a sharp and unshrinking volley of criticism, it seems very doubtful whether he would have left anything worth reading behind him. However, in his contemporary, the poet Welhaven, he met with an antagonistic critic, whose words were like rapier-thrusts, sharply dividing the good from the bad. The story of their long quarrel and controversy is among the most amusing episodes of Northern literary history, but it chiefly concerns us here to notice the beneficial effect on Wergeland of Welhaven's polished taste and artistic instinct. Conscious that his absurdities would be ridiculed, he set himself to be absurd no longer, and the last five years of his life (he died young, in 1845) are represented by noble works, full of power and melody, and displaying a greater reticence and a more chastened taste. Mr. Lassen has very wisely given his four greatest works in full, rightly considering that they are too excellent to be mutilated by selection. Two of these, *Jan van Huysum's Blomsterstykke* ("J. v. Huysum's Flower-piece") and *Svalen* ("The Swallow"), are lyrical romances, or rhapsodies, exquisite in fancy and sentiment and splendid in execution; another, *Jøden* ("The Jew"), is a protest, nobly worded, against the expulsion of the Jews from Norway, a remnant of barbarism since exploded; the last, *Den engelske Lods* ("The English Pilot"), is the latest and most finished of his writings, and, though surpassed, perhaps, in parts by the magnificent strophes of *Svalen*, is, on the whole, the finest work he left behind him.

Den engelske Lods begins with a description of the longing after land, the straining of the eyes that watch the horizon towards the end of a long voyage. The poem is written in short, irregularly rhyming trochees, with songs here and there. Presently the white cliffs of Dover glimmer on the horizon, and the sailors join in a Wergelandesque song to England, as the home of freedom:—

" What a glory
For a man
Here to live and love and labour !
What a glory
To live safe
In the old oak's shelter !"

We are then taken along the southern coast of our island; everything is minutely and vividly described, scenery and inhabitants, ships and towns, till we reach Portsmouth, where the pilot is introduced. He is the hero of the poem, and in the eighth canto he begins to tell his story, and in the end comes with the whole party back to Norway, to settle there with his old love, Mary Ann. The last two cantos, describing the scenery and life in Hardanger, where they come to live, have especial beauty and tenderness.

A strange quiet gathers round the record of a very stormy life. Remembering how completely his many-sided public

reputation has all slipped from him since his death, leaving him only a poet, into what a silentness all the thundering noises that sounded in his ears have fallen, how different the Christiania of to-day is from the city as he knew it, one recalls his own words sung over the grave of the poet Bjerregaard (I am forced to sacrifice rhyme in translation that I may preserve the order of the words and rhythm):—

" Bring your laurel-garlands here,
Now the poet's brows are heavy,
Cold and white !
Golden rain from leaves of laurel
Now no more can drop down poison !
On his grave
Pour them, till its sombre edges
Vanish, hidden by green leaves."

The versification of Wergeland is original and happy. He especially delighted in adapting his thought to the measure of old songs. It is strange that our poets have not availed themselves of the metrical discoveries of the Scandinavians. Mr. O'Shaughnessy seems to have borrowed something of the liquid numbers of the Swedes, but no other recognised English writer has availed himself of these, or of the bolder Danish metres. EDMUND W. GOSSE.

Septimus: a Romance of Immortality. By Nathaniel Hawthorne. Henry King and Co.

A POSTHUMOUS publication is always a trial to the reputation of the author concerned, and it might have been thought that the polish and elaboration of Hawthorne's style would make the ordeal peculiarly severe. But, on the other hand, the weirdly paradoxical effects at which he aimed may sometimes be almost as successfully produced by an unfinished outline, in which the salient points are hinted at and the rest left to imagination, as in a picture with every detail complete, so that it is impossible to ignore the incongruities which make, and yet are always on the point of marring, the fascination of the whole. Of all Hawthorne's works, *Septimus* has most in common with his greatest, *Transformation*. The common realities of earth are made to mingle, in about the same proportion, with the story of a spiritual life, passed partly under altogether unearthly conditions. The actual is not opposed to the ideal, for Hawthorne, with true artistic reticence, never sets his characters to carry out his own schemes of excellence; and this was fortunate, for, after all, his ideas were commonplace and circumscribed within the limits common to well-intentioned citizens of his age and country. It is opposed to, or rather artfully intermingled with, the imaginary: a world of visions of what might have been, of things morally possible though physically untrue. He persuades us to half believe the wonders he half asserts, because he never tires our credulity nor exhausts his own credit by an unnecessary demand or a quite unqualified fiction. After his wildest flights of fancy a sudden touch of realism will bring us down to modern American earth, and by these intermittent glimpses of the soberest sanity, he tempts us to reflect for a moment seriously whether perhaps there may not be some sense, spiritual or material, in which his legends may be understood to convey a truth. And this is all the triumph he aims at, for a brief shock to the normal scepticism of his intelligent contemporaries bears stronger testimony to the power of his imagination than the blind inconvenient faith of an enthusiastic mystic, who after accepting everything would wish to know what next. It is his want of purpose that constitutes Hawthorne's great superiority to the fantastic romance of Germany and to the romantic illuminism which at one time spread also into France and England, in which the mysteriousness was of incident, not of character, and

was always more or less explained away at last by a system of trap-doors and secret societies.

In *Transformation* the author's work seemed to be half done for him by the atmosphere of Rome, laden, in historical truth, with the inherited conflicting mysteries of innumerable ages. In *Septimus* there is no such accidental help, in fact the age and country in which Hawthorne has placed his hero seem chosen on purpose to bring the unreality of his quest into the stronger relief. A New England youth during the War of Independence slays a British officer of his own age, and remote common descent, from whom he receives an obscure ancient recipe for preparing the elixir of life; there is Indian blood in his veins, and he has already heard of the legend of an Indian ancestor of his who possessed such a secret; also, like other unpractical dreamers, who, because they do not know how to extract from life the pleasures it is said to afford, blame life rather than their own dull or misdirected senses, Septimus crowns his unreasoning complaints by settling that only the shortness of life is in fault, not its emptiness. The pursuit in which he sacrifices happiness and almost life is described with Hawthorne's usual skill, and it may be that he refrained from using the obvious mediaeval *cadre* because he distrusted his power of giving it all the reality necessary for the kind of illusion he desired. The only other reason for the choice is that it is part of the plot for Septimus to kill his relation, in all innocence, as a preliminary to profiting by his bequest, and that this can best be managed by a war between different branches of the same race. In the first half of the romance as it now stands, Septimus is the lover of a good and pretty girl, from whom he is gradually withdrawn by his absorbing pursuit and its chilling, hardening effect on his character; in the second half Rose is turned into his sister, and is peaceably betrothed to Robert Hagburn, the Werner of the tale, a rustic who volunteers for the war like a man, and, according to the first scheme, was the rival who would have consoled Rose for Septimus' infidelity. It is not clear what substitute could have been made for the passages where Septimus is gradually alienated from his betrothed, but the character of Sybil Dacy, which was evidently meant to be second in importance to that of Septimus, is very imperfectly worked out, and the author may have intended to transfer the account of his struggles between love and a diseased ambition to the earlier part of his intercourse with and passion for Sybil. We are not sure that anything is really lost by the story being thus cut into two halves which do not fit on to each other exactly, for each half is evidently written so as to do most justice to its leading motive, and something would have had to be sacrificed before complete structural unity could be attained. Besides this, Sybil is almost too artificial to be interesting; Septimus is at least half real, but she is invented for the plot's sake, and the features which are indicated in the work as we have it suggest that the author might not have avoided the danger of mannerism in completing them. On the other hand, the memoranda of ideas and fancies to be worked out, which are very rightly reproduced in the printed edition, seem to show that Hawthorne meant to develop in detail some of the more perplexing experiences to which a modern wandering Jew might be exposed, such as the natural antagonism between the mortal and the immortal, and the tediousness of infinite leisure, which proposes to spend a century upon every experiment of a new mode of life; there was to be a long conversation between Sybil and Septimus on this subject before they drank the magic draught which, the latter fancied, would make them immortal together. Septimus hesitatingly suggests after a good many philanthropic and ambitious schemes that for one hundred years he would try

what being wicked was like, and his embarrassment when Sybil unhesitatingly replies, "And I too," is humorously conceived. The catastrophe is more effective as a situation than the end of *Transformation*, but the melodramatic element in it rather interferes with the tranquil manifestation of the spiritual truths of the conclusion. The material future of Miriam and Donatello is scarcely indicated, but we know that as long as they lived their penance must have been tempered by the consciousness of a union of soul the more perfect in proportion as it was dearly bought. Sybil, on the contrary, has to be violently removed from the scene on which she only appeared to execute a mysterious vengeance, and Septimus, we feel, is disappointed rather than disillusioned. The elixir of life is left to rank as an unattainable possibility, and though this is just how Hawthorne wishes to persuade his readers to regard it—for an hour or two—it does not seem fitting that an actor in the romance should be brought to exactly the same standing-point as the spectators. On the whole, in *Septimus* Hawthorne is sometimes at his best, and never betrays anything that can be confidently taken for a sign of failing powers, and for this reason it is doubly welcome to us; it is pleasant that the last words of a writer whom it is impossible not to esteem, and easy to admire, should be worthy of himself, and the Note-books and Journals which were so abundantly bestowed upon the public were distinctly not worthy. They seemed to represent the childish docility of the man of original invention and creative fancy in the passive hours when he was living for himself, not for the world, and having brought back from the land of dreams no prejudices in favour of one way of living rather than another, he tried with good-natured indolence to live the life and think the thoughts of the many. Or, perhaps, a better explanation of how he could write so like a schoolboy, about scenes and paintings from which his fancy is proved to have derived much wholesome nourishment, is to be found in the peculiarity of his intellect, which was powerful and ingenious enough while only applied to objects of his own invention, but had so little sympathy with unadulterated reality that its judgments had to be either conventional or false; and of the two alternatives his modesty preferred the first.

H. LAWRENNY.

LITERARY NOTES.

"An Admirer of Keats" writes to the *Athenaeum* to give a version of his sonnet "To Sleep," which differs considerably from the one published by Lord Houghton in his *Life and Letters*. It is apparently a first draft, and was found written in the margin of a copy of Milton which had been lent to the poet. After the third line it continues, instead of "Enshaded in forgetfulness divine"—

"As wearisome as darkness is divine;
O soothest Sleep! if so it please thee, close
Mine willing eyes in midst of this thine hymn,
Or wait the amen, ere thy poppy throws
Its sweet-dark-dews o'er every pulse and limb;
Then shut the hushed casket of my soul,
And turn the key round in the oiled wards,
And let it rest until the morn."

The next line contains various corrections, and the end of the sonnet is wanting. The writer also quotes a few of Keats' prose annotations in the same volume, which was in the possession of the late Mr. Dilke: they are different in some respects from those reprinted by Lord Houghton from the *American Dial*.

A new book by David Strauss is announced, *The Old and the New Faith: a Confession*. It is in four sections, headed—I. Are we still Christians? II. Have we any Religion? III. How do we conceive the World? IV. How do we direct our lives? Two supplements, "Concerning our Great Poets," and "Con-

cerning our Great Musicians," would seem to contain the gleanings of the author's critical commonplace books.

The Royal Bavarian Academy of Sciences has just received the report of the Historical Commission on its thirteenth general meeting; most of the works announced are in continuation of previous undertakings, but it is said that the *Universal German Biography*, begun at Ranke's suggestion, will have one volume, containing the letter A, ready for publication by the new year. More than 200 contributors, including all the principal German historians, are mentioned as interested in the work.

Le Royaume d'Yvetot, which in most people's minds stands on a level with *le pays de Cocagne*, has just received the honours of an historical monograph. The rights and privileges of the king of Yvetot were quite real. Louis XI. and Henri IV. treated the miniature sovereigns with respect, and though a legend which dates the independence of the fief from Clovis is untrustworthy, a *roi d'Yvetot* seems to have reigned as early as the twelfth century. The kingdom was sold—like the Roman empire or the principality of Monaco—in the fifteenth century, and fetched 1400 gold crowns.

Mr. Fr. Frommann, of Jena, has in the press another Greek comedy by Professor Julius Richter, called *Chelidones* ("The Swallows"), in which, with Aristophanic humour, he characterises the Ultramontanes and Communists as bad citizens of one and the same species.

M. Luzel has just published, in a pamphlet form (*De l'Authenticité des Chants du Barzaz-Breiz de M. de la Villemarqué*; Paris: Franck), the lecture he delivered at Saint-Brieuc, last July (cf. *Academy*, vol. iii. p. 260, where, by the bye, the name of M. Mowat has been misprinted Morvat). His subject was the authenticity, or rather the want of authenticity, of the would-be popular Breton ballads published by M. de la Villemarqué under the name of *Barzaz-Breiz* (lit. "The Bardism of Brittany"). M. de la Villemarqué had given his name to deliver a lecture at the "Congrès" on some archaeological question, but when he heard of the intended lecture of M. Luzel, he deliberately declined to go. No objections were made to M. Luzel when he had done reading; but friends of M. de la Villemarqué were not ashamed to ask that, contrary to the custom, no mention would be made of M. Luzel's lecture in the *procès-verbaux* of the day; such exception, said they, was made necessary by the personal question introduced into the debate. And M. de la Villemarqué had been purposely absent! That suggestion, however, was objected to by eminent members of the "Congrès," amongst whom was one of the patrons of Breton literature, the worthy bishop of Saint-Brieuc, Mgr. David. Such impediments in the research of historical truth make M. Luzel's merits greater. The question treated by him had already been the subject of several articles, here and there, by M. d'Arbois de Jubainville, by M. Liebrecht, by M. Le Men, and by M. Luzel himself, and had ceased to raise doubts in the minds of scholars; but the matter is altogether settled by this last pamphlet of M. Luzel, the candid and careful collector of Breton lays, legends, and tales, who has a special competence in the question. It is to be regretted that M. de la Villemarqué so obstinately gives, as actually sung by the people, ballads which are either arranged and embellished or altogether forged. Would he candidly confess that, when he published his *Barzaz-Breiz* for the first time (nearly forty years ago), criticism was not very strict with editors of popular poetry, and that he thought himself permitted, by the example of Walter Scott and others, to arrange popular materials, or even to make fictitious ballads, every one would readily forgive him that, and remember only the real services he has conferred on Breton literature by his various publications. But by unwisely pleading "not guilty," when the evidence brought against him is so strong, he has succeeded only in making his case worse.

Théophile Gautier, the patriarch of the second generation of Romantics, died at Paris on Wednesday, the 23rd ult. We hope to speak more fully of the place he filled and the blank he leaves in an early number.

The Drama and Art.

PARISIAN THEATRES.

MOST of the theatres are now open for the winter season: and some have already mounted new pieces. At the Français *Le Cid* of Corneille is being given, in order to enable M. Mounet-Sully to appear in the part of Rodrigue. The play is performed, almost for the first time, as Corneille wrote it, without the usual omission of the part of the Infanta. Appropriate scenery and dresses have been provided, so that the masterpiece of the older drama is presented to the public with due magnificence and care. But the actors? Let us take Mounet-Sully first. The part of Rodrigue is a very arduous one for any actor, and for a novice in his art almost impossible. It is all in one key. Called upon by his own father, Don Diègue, to avenge an insult inflicted on him by Chimène's father, Don Gormas, he has to choose at once between his father and his mistress. It is the old conflict of love and duty. He kills Don Gormas, and for the rest of the piece has to deplore his sufferings from the implacable enmity of Chimène. This series of lamentations is interrupted only by one splendid burst of eloquence—the speech in which he recounts the surprise and defeat of the Moorish army in a night-attack on Seville. The first qualities Rodrigue should possess are dignity and repose. It can scarcely be said that Mounet-Sully possesses either. He is violent and passionate: his gestures are extravagant, and want variety. There is no light and shade in his performance. He chants the verses in one key, as if they were the utterances of another person, and not the expression of his own thoughts and feelings. He is at his best in the delivery of the stanzas at the end of the first act, when he determines to challenge Don Gormas: but his whole conception of the part is so uncertain and inartistic as to destroy almost entirely that hope of future excellence to which his Orestes in *Andromaque* had given rise. On the other hand, nothing could be better than the Don Diègue of Maubant. His distress when his sword falls from his enfeebled hand, his passionate appeal to his son, "Rodrigue, as-tu du cœur?" and his pride in his success, are alike admirable. Mlle Roussel, too, did her best with the thankless part of Chimène; and certainly delivered the famous line, when she appeals to Rodrigue to defeat her champion,

"Sors vainqueur d'un combat dont Chimène est le prix," with a passionate intensity that went to the heart of the audience. The rest of the actors speak the lines allotted to them with correctness and propriety. They have nothing else to do.

A new piece has been brought out at this theatre under the title of *Les Enfants*, by M. George Richard. It might be called in English, "What's to be done with the Children?" and deals with the oft-debated question of the position of those young people whose parents have declined to submit to the ceremony of marriage. But though, as I heard one gentleman say to another after the piece was over, "C'est une belle thèse"; M. Richard has done little towards the solution of the problem he proposes. The play is admirably acted, but is too slight to have a long existence. The best thing in it is a wonderfully graceful game of romps between the two children, impersonated by M. Boucher and Mlle Reichemberg.

At the Vaudeville, *L'Arlesienne*, by Alphonse Daudet, has not met with the success that was expected. The author is a man of letters and a poet, but has never been successful as a dramatist. His present play is a prose idyll rather than a drama; and taken as such is extremely beautiful. Each act shows a true picture of peasant life in Provence, made more exquisitely real by lovely scenery: but despite these attractions, and the simple poetic language, and the magnificent impersonation of a mother by Mlle Fargueil, the fatal defect of want of action wearies the audience and ruins the piece.

The Odéon has reopened with a so-called "comedy" by Édouard Plouvier, a writer of great repute, to which he has given the odd title *La Salamandre*. It deals with the fortunes of a young lady, who, placed by no fault of her own in a position that compromises her, comes out of the ordeal with unblemished reputation. The idea is ingenious, and might possibly, in abler hands, have been made the groundwork of a really fine play: but, as it stands, the great situation is repulsive, and the characters, when not contemptibly weak, are odiously disagreeable.

The Châtelet has just reproduced *Patrie*, with a very good cast and splendid appointments.—The Ambigu is about to play a new drama, *Le Centenaire*, with the veteran Lafont in the principal part.—The Gymnase has reproduced that evergreen *Le Fils de Famille*, surely as graceful a piece of witty and harmless badinage as was ever played on any stage. How charming, too, is the music! and how delightful nowadays to have the opportunity of enjoying a piece in which the songs form a part of the dialogue, instead of a tiresome interruption to it. London playgoers may recollect it years ago, under the title of *The Lancers; or, The Gentleman's Son*.

The Français—after certain *reprises* of well-known plays—proposes to bring out the *Hélène* of Pailleron, author of *Les Faux Ménages*. After this *Marion Delorme* is promised, with Mounet-Sully as Didier: an announcement that would be rather depressing, were it not that an antidote is provided in the fact that all the best actors will appear in the other parts.

J. W. CLARK.

ART NOTES.

English art has had a heavy loss in the death of Mr. George Mason, Associate of the Royal Academy. Mr. Mason's health had for years been such as to cause anxious apprehension to his friends; he suffered very severely in the course of last winter, and has died on the approach of this (October 22, *aet. 54*). Since Gainsborough there has not been a more poetical and refined painter of English landscape and country figures than Mr. Mason. His place among contemporaries was rather by the side of the French pastoral painters, M. F. J. Millet or M. Jules Breton, than by that of any of his fellow-countrymen. A singular elevation and harmony, a singular and pathetic sweetness of feeling, have given to all his later work a charm and dignity which are very rare in the English painting of the hour. Mr. Mason's instincts were equally fine and true in colour and design; although, in both, his work might occasionally show a little of the hesitation and incompleteness of amateurship—for it was late in life that he began the professional practice of art—as well as of ill health. Mr. Mason was resident in Italy from 1844 to 1858, and a few of his pictures represent Italian scenes. But the great bulk of his contributions to the Royal Academy, for the last dozen years, have been small compositions of English midland landscape with village figures and field labour, in quiet colour and of an exquisite grace and tenderness. There are only three of his pictures, the "Evening Hymn," the "Girls Dancing," and the "Harvest Moon," of this year, which his physical powers enabled him to complete on a scale sufficient to do full justice to his original, harmonious, and delightful genius. (For some more particular observations, see *Portfolio*, August, 1871; *Athenaeum*, October 26, and *Pall Mall Gazette*, October 28, 1872.)

In addressing the Cortes concerning the fire which took place at the Escorial on the night of October 1, the minister of finance, Ruiz Gomez, said, "Not a book has been burnt, nor a paper lost. It is a question of time and money, that is all." The area burnt is large, including the whole of the upper floors of the Colegio and the two towers known as the Colegio Tower and the Tower of Lucerne. The *Times* correspondent, writing on October 7, gives a vivid description of the ravages of the fire, but confirms substantially the reassuring words of the minister; he differs from him, indeed, as to the amount of damage done to the edifice, which he estimates as likely to come to twice the amount (40,000!) officially stated as the probable cost of reparation. Besides the Hebrew and Arabic MSS., of which catalogues exist, and other valuable MSS. and books, amounting in all to 14,661, the library contained original sketch-books by Michel Angelo, Raphael, Titian, Albrecht Dürer, and other great masters. Great fears were entertained for the ceiling, which is one of the most magnificent pieces of decorative work in the whole building, but the rubbish which had fallen on it from the floors consumed above having been carefully removed, it has been found to have sustained none but trifling and easily reparable injuries. The heroic exertions of the inhabitants, and the fact that the architect of the enormous pile employed no wood in its construction where he could possibly use stone, prevented the conflagration from

spreading to the palace or church, and confined its ravages entirely to the Colegio end.

Fresh fruits are reported from various excavations on the classical sites of Asia Minor. Mr. Wood has just discovered several more fragments of sculpture in relief at the temple of Diana of Ephesus. Of these he writes that the most remarkable is a portion of the same frieze in vigorous projection of which a corner-piece, representing an Amazonomachia, is set up (labelled "Pilaster?") in the Mausoleum room at the British Museum.—The undertaking of Dr. Henry Schliemann is a less known and even a more colossal one than that of Mr. Wood (see *Academy*, vol. iii. pp. 26, 68). Dr. Schliemann is an archaeologist entertaining some eccentric views, but deserving the utmost credit for the zeal which has led him to spend time and fortune in searching for the ruins of ancient Troy. It would seem that Dr. Schliemann has really hit upon the Lysimachian temple of Athene at Ilium Novum. He has courteously promised to the British Museum the cast of a sculptured metope, complete between two triglyphs, from this building. This, judging by the photograph, must be a fragment of a very high value indeed. It represents Helios (with the radiating crown as on the coins of Rhodes) driving a *quadriga*, and is in the highest finish. The horses are extremely vigorous in design and action, and the flying draperies of the figure have a remarkable resemblance to those of the well-known "Niobid" of the Chiaramonti gallery in the Vatican. Generally it is an animated and picturesque style, recalling that of other sculptures belonging to the end of the fourth century B.C. Dr. Schliemann announces the publication of the fragment, together with an inscription found on the same site, in the Berlin *Archaeologische Zeitung*.—In addition to these discoveries, Dr. Schliemann, clearing the circumjacent ground to the depth of 50 feet, with a gang of workmen 150 strong, has disclosed a prodigious structure of masonry sloping at an angle of 30°, which he would have to be part of the substructure of the Trojan Palladium itself. But the publication of Dr. Schliemann's projected *Prachtwerk* on Troy must be awaited before any exact judgment can be formed as to these latter discoveries.

The commission named, half by the Italian government and half by the municipality of Florence, for the conservation of the "David" of Michel Angelo has determined on the plan to be recommended. A pavilion is to be erected in the Academy of Arts to receive the colossus at the cost of about 72,000 lire; the cost of transport is reckoned at about 20,000 lire, and the removal is to be accomplished by means of an ingenious invention of Signor Francisco Porra.

We learn from Paris that the cabinet of medals and antiques in the National Library was reopened to the public on October 1. Monday, Wednesday, and Friday are to be held sacred to students; Saturday is reserved for the work of the catalogue, and Tuesday remains for visitors. The new gallery of sculpture which is being arranged in the Louvre, between the pavilions Mollien and Daru, is to receive the statues from the various imperial châteaux, and those already in the Louvre which have been judged the most important. At the end of the gallery is to stand the statue by Michel Angelo, which has remained for years forgotten at Chenonceaux. This new gallery is to be called the *Salle Michel-Ange*, and will be opened to the public as soon as the decorative paintings which ornament it are finished. This work has been entrusted to M. Birouin.

In the course of the present year the South Kensington Museum has restored to the people of Bayeux the morsel missing from the celebrated tapestry preserved in that town. The thief was no other than the wife of Stothard the artist, who went to Bayeux in 1830 in order to execute his well-known copy of the work in question. Mrs. Stothard profited by the courteous facilities granted to her husband for the purposes of his painting to cut with her scissors a piece about as big as a hand from one of the sides of the embroidered cloth. At the death of Mrs. Stothard, some years back, the museum of South Kensington became possessed of the stolen piece, together with an account written by Mr. Stothard, of the circumstances under which his wife committed the disgraceful theft. The directors of the South

Kensington Museum, when sending over this summer some artists to photograph the tapestry, announced their coming in a letter containing the relic, which has been gratefully received, and found to agree thread for thread with the original.

The *Nordische Presse* reports with reservations a rumour current to the effect that amongst the art treasures at St. Petersburg, purchased by the empress Catherine II., a piece of sculpture from the hand of Raphael has been recently discovered. The subject is a Child resting on a Dolphin. The same authority adds that the original of this work was known to exist in Paris up to 1770, and that there are many reproductions of the design both in plaster and engraved. The rumour is perfectly correct. This group, attributed to Raphael both by Förster and Passavant, has been recently exhibited to the public in the Hermitage palace. It was acquired by M. de Bertueil in Rome in 1768, and afterwards lost sight of. M. Guédéonoff, the active director for the Fine Arts at St. Petersburg, has found in an inventory of the time of Catherine II. proofs of the acquisition of the group.

A magnificent collection of etchings by Dutch painters was sold by auction, on the 5th of October, by Lepke, at Berlin. They were brought together by Baron Heinrich von Mecklenburg, who died in 1862. The catalogue was written by Herr Amsler, and it is hardly possible to cite any examples, as, out of the entire number, not one middling impression was to be found. —On the 14th of October, Boerner brought to the hammer at Leipzig the collection of Ferdinand Kern, the fruit of sixty-six years of diligent search. The principal gems were the numerous and rare engravings by Italian masters of the sixteenth century. —But on the 24th of October, a collection, surpassing, perhaps, in peculiar interest, either of the two above mentioned, was sold at Munich, viz. the very remarkable collection of the works of the so-called *petits maîtres* and goldsmiths which belonged to Dr. Posonyi, of Vienna.

The death of Count Schlieck took place recently at Paris, where he had resided for some time past. He enjoyed a great reputation especially in the Northern courts of Europe, acquired by his designs for sumptuous articles of plate, and his general elegance of taste in ornamental design. He lived at one time in Pompeii directing excavations, making casts from objects found, and copies from the frescoes in tempera. He has been lately engaged in the arrangement of his collections, which were very considerable, intending to sell them *en masse*. It is said that he leaves no heirs, and in that case the whole of his art-treasures will go to the state of Denmark, of which he was a native.

In the *Times* of October 9, Mr. Stuart A. Moore draws attention to the fact that exact calculations based on the entries of the Fabric Rolls of Exeter Cathedral (made in the year 1317-18, when the Lady Chapel appears to have been re-decorated and the four side windows glazed) show that even in the Lady Chapel, where glass is generally supposed to be the richest, the proportion of coloured to white glass was only a little over one-fourth. Thus, he says, in no case did the glass resemble the gorgeously stained abominations of the modern school.

Herr Jordan gives in *Im Neuen Reich* a particular account of the statue to Leonardo da Vinci which was unveiled at Milan on September 4. Signor Pietro Magni is the sculptor, and in spite of certain grave defects, Herr Jordan pronounces that he has on the whole achieved a work of distinguished monumental character. The figure stands sunk in meditation, and is very simply treated; at the corners are placed statues of his principal scholars, Cesare da Sesto, Marco d' Oggiono, Beltraffio, and Andrea Solario. These figures are well worked out; a little stiff indeed, but the serious matter is that they do not incorporate well with the whole. The high octagonal pedestal is very well designed. The loan exhibition in the Brera afforded a rare and magnificent opportunity of seeing the works of the great master; something like three hundred paintings by his hand had been collected from the palaces of the nobles in which they are usually hidden from public gaze. As to the modern paintings, Herr Jordan remarks the triumph of "fare da se," but confesses that as to technic it had not yet come to the shamelessness of Paris. He concludes his paper by drawing attention

to the desirability of at once printing and so securing to posterity the wealth of MSS. which Leonardo left behind him. The principal part of the treasure was removed in 1796 from the Brera to Paris, and with the exception of a stray paper or two the commissioners of 1815 left it undisturbed. A few papers are in England. Herr Jordan proposes that a society should be formed for the publication of the whole.

New Publications.

- ASSING, Ludmilla. Fürst Hermann von Pückler-Muskau: eine Biographie.—Briefwechsel und Tagebücher des Fürsten Hermann von Pückler-Muskau. Hamburg: Hoffmann und Campe.
- BRONTE, Charlotte. Jane Eyre. Illustrated edition. Smith, Elder, and Co.
- CROWE and CAVALCASELLE. Lives of Flemish Painters. Murray.
- HARE, A. J. C. Memorials of a Quiet Life. Strahan and Co.
- MONTAIGLON, Anatole de. Recueil général et complet des Fabliaux des XIII^e et XIV^e siècles. Paris: Librairie des Bibliophiles.
- NICHOL, J. Hannibal: a Historical Drama. Glasgow: Maclehose.
- RICHTER, J. P. Christliche Architektur und Plastik in Rom vor Constantin dem Grossen. Jena: Frommann.
- SAND, George. Francia. Paris: Michel Lévy.
- STRAUSS, D. Der alte und der neue Glaube. Leipzig: Hirzel.
- TROLLOPE, A. The Eustace Diamonds. Chapman and Hall.
- VETTER, F. Zum Muspilli und zur germanischen Alliterationspoesie. Wien: Gerold's Sohn.
- WERNER, Carl. Nile Sketches; with Descriptive Text by Dr. Brehm and Dr. Dumicken. Part II. Sampson Low.

Physical Science.

The Beginnings of Life. By H. Charlton Bastian, M.A., M.D., F.R.S. Macmillan and Co.

THIS book of Dr. Bastian's may be regarded as representing the final result of his long series of experiments and observations which have already partly been published in his well-known papers in *Nature* and in his smaller work on the *Origin of Lowest Organisms*.

The present work is divided into three parts: I. The Nature and Source of the Vital Forces and of Organizable Matter; II. Archebiosis; III. Heterogenesis.

Part I. is intended, according to the preface, "to show the general reader more especially that the logical consequences of the now commonly accepted doctrines concerning conservation of energy and the correlation of the vital and physical forces are wholly favourable to the possibility of the independent origin of living matter." That the evolution of organic matter by the action of physical forces took place in the remote past follows of necessity from the general hypothesis of evolution, but Dr. Bastian fails to see how it can be that this evolution of organic matter, having once taken place, should not constantly have recurred and indeed be continually occurring at the present time. But that such an opinion may logically be maintained by those who hold the theory of evolution will be seen from the following considerations.

Complex organic compounds are formed by the chemist in the laboratory by a gradual process. Thus by exposing certain inorganic substances to suitable conditions, a comparatively simple organic body, A, is obtained; A exposed to different conditions yields a more complex body, B; B yields C, and so on. Now this is the only method, as far as is known, by which complex organic bodies are formed apart from the influence of living matter, and thus it is conceived that the original evolution of organic matter took place in a like manner by a series of steps. The chemist has not nearly attained to the formation of bodies so complex as the protein-compounds which are the invariable concomitants of the exhibition of the phenomena of life, but it may well be concluded that, if ever the synthesis of such bodies

be attained, it will be by a long series of steps, say A-Z. As the organic bodies forming the successive steps are more or less unstable, it is necessary that the conditions requisite to raise each body one step should occur before disturbing influences, which would change the constitution of that body, have come into operation. Thus, in nature, compounds A, B, C might often be formed without leading at all to the formation of Z. Further, at the remote period in the earth's history at which the evolution in question is supposed to have taken place, the conditions of atmosphere, temperature, &c. were very different from what they now are. So that it would appear that, if it be admitted that the evolution of organic matter must necessarily be a gradual process such as that described, it may quite logically be held that the process, having occurred once, is not likely ever to recur, and the case is paralleled by that of certain minerals which are extremely local in their occurrence, and the conditions for the formation of which must have been brought together on very rare occasions. The Latin language was formed by a process of evolution, but it is almost inconceivable that the complex conditions requisite for its production should recur. At all events, the hypothesis that organic matter was thus evolved by a series of gradations brought about by a succession of complex conditions is in accordance with known chemical processes, and is therefore an explanation of the phenomenon; whilst the rapid formation of such matter in saline solutions which Dr. Bastian's experiments would seem to show is entirely unparalleled in the laboratory.

Another argument in favour of an *a priori* probability of the occurrence of the formation of living things at the present time brought forward by Dr. Bastian is that, unless this is the case, it is impossible to account for the present existence of such low organisms as the Monera, which are mere (and apparently homogeneous) masses of protoplasm, since these bodies must necessarily have become modified and have reached a higher state of organization during the lapse of ages. Professor Haeckel (*Biologische Studien*, p. 182) lays considerable stress on this point, and concludes that the moneron *Bathybius* at least is constantly coming into being *de novo* at the present day. Surely, however, *Bathybius*, inhabiting as it does the bottom of the deepest oceans, must exist under circumstances almost invariable, and, in the absence of any inherent tendency to take on a higher form, which tendency the evolution theory cannot admit, but which Dr. Bastian, in order to account for his results, is obliged to postulate, may have so existed from the very earliest times. From time to time some portion of the region inhabited by this Moneron may have been elevated, and being thus brought under the influence of varying conditions in shallow water, *Bathybius* may have become differentiated on the confines of the area occupied by it, may have formed a constant source of the Monera of sea-shores and fresh water, whilst the main bulk of its simple protoplasm may have always occupied the deepest seas and there reproduced itself unchanged. Surely this may well be considered a possible case of survival, and is no more difficult to explain than, e.g., the survival of savages at the present day.

The latter portion of part i. is occupied by some account of the nature of low organisms. Amongst these are described Professor Haeckel's Monera, which, as before explained, are mere minute masses of structureless protoplasm, the lowest of them having no definite form at any period of its existence, but one which is constantly undergoing change. Now it is bodies such as these which, according to Professor Haeckel and Mr. Herbert Spencer, must have been originally evolved from inorganic matter, and have been the source of all higher organisms, and their forms

are such as protein-compounds may readily be conceived to have taken under the action of their known physical properties and the influence of immediate surrounding conditions. Hence the discovery of the Monera was regarded as of the utmost importance to the evolutionary theory as supplying a lost link between the lowest organic beings until then known and matter not living, and it was considered that, if by experimental means the evolution of living from not living matters could be brought about, the first form which they would be expected to assume would resemble that of the simplest Moneron. The living things obtained, however, by Dr. Bastian in his experiments are not found to have the indefinite form of the Moneron, but are bodies which have very definite shapes, in many cases obviously adapted to their special mode of existence or progression, and more or less heterogeneity of structure, some of them very considerable heterogeneity. The forms are Bacteria, Vibriones, Torulae, Moulds, &c.

Part ii. contains the pith of the evidence derived from observation and experiment which Dr. Bastian has to offer in favour of archebiosis, as he terms the origin of life *de novo*. The observations consist in the investigation with a high power of the microscope of the visible changes which take place in solutions in which the development of living things is proceeding. There seems very little doubt that Bacteria develop in solutions in which no particles whatever can be observed with the microscope. This is Professor Burdon Sanderson's conclusion, and according to his observations these bodies first make their appearance as indefinitely minute spheroidal particles which subsequently develop into Bacteria, and it is possible that other low forms of life, though certainly not fungus spores, may appear in the same manner. To suppose that these forms spring from invisible germs is to make an hypothesis which is in harmony with our knowledge concerning the origin of other living things. There is no reason why the germs of Bacteria should be visible; and, as Dr. Burdon Sanderson remarks, "there is an immense preponderance of evidence that microzymes do not spring into existence of themselves in the media where they grow."* There is, moreover, no inconsistency in postulating the existence of invisible germs in the case of living things, and not postulating invisible crystalline germs in the very different case of the appearance of crystals in solutions where the facts necessitate a different explanation.

The experimental methods employed to determine whether living things arise *de novo* are all more or less alike. A fluid known to be capable of supporting the life of low organisms is put into a glass vessel. The vessel is then heated, the fluid is boiled, and the mouth of the vessel hermetically sealed, plugged with wool, or twisted up and down with the intention of the prevention of the access of germs to the fluid. It is admitted now on all hands that prolonged exposure to the action of boiling water destroys all life in solutions; hence, if undoubtedly living things be found in solutions treated as above, from which germs have certainly been excluded, the only possible explanation of the phenomena is that the living things have been evolved *de novo*. Pasteur's experiments made in this manner are well known, and his results were confirmed by Professor Lister and others. Pasteur showed that in a large number of solutions capable of supporting life, when these had been boiled, and proper precautions had been taken to prevent the access of germs, no living things whatever developed themselves. Pasteur attributed the development of all forms of life observed in ordinary exposed solutions to germs almost universally

* "Second Report of Researches concerning the Intimate Pathology of Contagion," reprinted in *Quart. Journal of Microscop. Science*, No. xliv. p. 325.

present in the air; but Dr. Burdon Sanderson has recently shown that in the case of Bacteria this view can no longer be maintained. His experiments prove that the germs of Bacteria can only be conveyed by water. A solution eminently adapted to the support of Bacteria may remain exposed to the air for any length of time and yet not a single Bacterium will develop in it, whereas the addition of the smallest drop of water will produce Bacteria in abundance. It is very probable that the germs of other low organisms which have hitherto been supposed to reach solutions by means of the air may be found to be communicable like Bacteria only in the wet state. This discovery of Professor Sanderson's is certainly the most important one in this line of research which has been made of late years. Fungi, on the other hand, Professor Sanderson shows, develop in these solutions in quantities directly proportionate to the amount of their exposure to the air, and from these and other considerations concludes that the developmental connection supposed to exist between Bacteria and Fungi, and which, it will be remembered, was maintained by Professor Huxley, can no longer be upheld.

M. Pasteur's well-known experiment of catching the germs from the air on cotton wool, sowing them in solutions devoid of life, and thus causing these solutions to teem with living things, is explained by Dr. Bastian by means of an all-pervading ferment in the air capable of setting up chemical changes in boiled solutions which lead to the development of organisms *de novo*. Dr. Burdon Sanderson's experiments, it would appear from a note (vol. ii. p. 14), are to be similarly explained by an hypothetically all-pervading ferment in water. An all-pervading germ hypothesis is undoubtedly much better than this, and indeed in the case of Dr. Sanderson's experiments the ferment hypothesis will not apply, for the ferment would not be destroyed by mere desiccation without heat. Further experiments of Dr. Sanderson resembling those of Pasteur showed that the development of living things *de novo* does not take place in serum of blood, white of egg, or Pasteur's solution, after they have been heated sufficiently to destroy germs, and also that diminution of atmospheric pressure does not affect the result. There is thus abundance of evidence that living things do not develop in a large number of solutions which are well adapted to their support, and are such as they might therefore be expected to develop in *de novo*, if that event were probable at all; but Dr. Bastian assures us that he obtains the same results with these same solutions, or that in those instances in which his results are different that difference is caused by a modification in the conditions of the experiment, that is to say, a diminution of atmospheric pressure, which Dr. Bastian alleges to be necessary for the production of living things *de novo* in some solutions, while he considers it *favourable* to the attainment of that result in all. Dr. Bastian seals the flasks with which he is experimenting during ebullition of the contained fluid, and by this means, when the apparatus has become cool, a partial vacuum is formed in the vessel. Experiments were made in this manner with hay and turnip infusions, in which every possible precaution appears to have been taken to exclude or destroy germs. In nearly all cases after the lapse of some time the solutions became turbid, or exhibited a scum, and microscopic examination showed the existence of organic bodies in the fluids, and in some cases of Bacteria in active motion.

Now the only possible answer to be made to experiments such as these is that the turbidity or scum in the solutions was not caused by a development of organisms, but by some coagulation or similar alteration in the fluid, and that the bodies seen in the solutions were not living, but dead,

and had been there all the time. It must be noted that it is not stated how long the solutions were kept after filtration before being made use of, and that samples of the solutions do not appear to have been carefully examined beforehand. Other experiments were made with saline solutions, such as ammonic tartrate with sodic phosphate, in some instances heated after enclosure in the tubes up to 295°–307° F., and maintained at that temperature for four hours.

It is obvious that only experiments with saline solutions bear directly on the question of the original evolution of life. In one such experiment (Expt. g, p. 464) the tube was opened in Professor Sharpey's presence. There was found in it a body, of which a drawing is given, resembling a tuft of Penicillium, and a quantity of similar fungus matter, "in which the remains of the filaments were seen in the form of more or less irregular rows of brownish granules." The disintegration and browning are attributed here to decomposition, but it seems far more probable that they were due to the action of heat. It is further to be noted that tufts of Penicillium spores, such as that here depicted, are believed by botanists to be developed only in the air on the surface of liquids or matrices, whereas this is supposed to have been developed *de novo* entirely beneath the surface of the liquid; and the only authority which Dr. Bastian can give us for the submerged growth of such bodies is M. Pouchet. Moreover, from Dr. Bastian's own observations, it is almost certain that the crystals of ammonic tartrate employed to make the solution here experimented with contained plenty of fungus matter just like that which was observed (vol. ii. Appendix B, p. xviii), and that therefore such bodies must almost certainly have been originally present in the solution. Further, the filament attached to the tuft of spores has, according to the drawing, its contents coagulated into irregular masses, as if by heat. In a comparative experiment, in which a similar fungus was similarly treated, the plant, though disintegrated, had still sufficient structure remaining in it to allow the easy recognition of mycelium and spores. Most probably, had the experiment been repeated, less alteration in structure might have been observed. There is little doubt that all the Fungi obtained in saline solutions were derived from the crystals employed. Some of the Fungi figured appear to show the action of heat more plainly than in the one we have just considered (*e.g.* fig. 29, c, vol. i.).

It might easily have been determined whether the spores in the experiment were alive or no by placing the mass under the microscope in a suitable fluid, fixing in the field of view one particular spore, which undoubtedly belonged to the mass, and observing whether this spore developed or not. Such an observation would have been crucial; but it was not made in any case. The only attempt made to determine whether the organisms observed in the solutions were living or not was in the case of Expt. 4, vol. i. p. 368. Here Torulae obtained from a solution were mounted in glycerine and carbolic acid, and are said to have been found increased in size and number after the lapse of two weeks. But the fluid here employed most probably contained plenty of living Torulae, and the whole increase observed may have been due to the multiplication of these. Such is the nature of the evidence which Dr. Bastian thinks it worth while to offer in a work of such pretensions as the present.

The simple faith with which Dr. Bastian looks forward to the conversion of Mr. Herbert Spencer (vol. ii. p. 603) to archebiosis and heterogenesis (this latter in Dr. Bastian's sense), and to the general revolution in science to be brought about by his work, cannot but impress the reader with the firm belief which the author has in his own results. But the absurd statements concerning heterogenesis which

are made in the third part of the book under consideration must tend to render the faith of biologists in Dr. Bastian's powers as an observer extremely small. Three great authorities, Professor Huxley, Dr. Sharpey, and Mr. Berkeley, have been shown by Dr. Bastian the result of some of his experiments. That Professor Huxley was not convinced, but believed that none of the bodies exhibited to him were alive, is well known to all. The opinion of Dr. Sharpey and Mr. Berkeley has unfortunately not been published, but surely, if it were favourable to Dr. Bastian's view, he would not fail to say so. The fact that Dr. Burdon Sanderson gets a negative result in experiments with blood serum, whereas, under the same conditions, Dr. Bastian gets a positive result with solution of beef, an extremely similar substance, cannot fail to generate scepticism concerning Dr. Bastian's operations with other solutions. At all events, in a question of such importance as the present, judgment must be withheld until Dr. Bastian's results are tested by some observer whose name will carry weight with it. This might appear likely to be a long and arduous undertaking, since (significant fact) Dr. Bastian tells us that nothing is easier than to get negative results; but fortunately there is one solution which gives, in 999 cases out of 1000, positive results. And Dr. Bastian appears to be willing to stake the question of archebiosis on this one experiment. The solution is a strong infusion of turnip with a fragment of cheese in it under diminished pressure. It is to be hoped that some one will try this experiment, following Dr. Bastian's methods exactly, with, perhaps, it may be suggested, the further precautions that the flasks employed should be strongly heated just before they are used, and that the observer should, as a preliminary measure, make himself thoroughly acquainted with the appearances presented under the microscope by a fresh strong solution of turnip, in which cheese has been boiled.

It is very difficult to believe that a diminution in atmospheric pressure can have much influence on the formation of organic matter in solutions, and considering, on the one hand, the *a priori* improbability of the formation of Bacteria, &c. *de novo* with the great weight and high value of the evidence already adduced against its occurrence, and estimating, on the other, the value of the evidence here put forth, it seems very unlikely that Dr. Bastian's results will be confirmed.

Part iii. treats of heterogenesis, which term is defined to mean a process whereby the matter of already existing living things gives birth to other living units wholly different from themselves, and having no tendency to revert to the paternal type. That is to say, the spore of an alga can, instead of giving birth to a similar alga, produce a worm. This very process Dr. Bastian affirms actually to occur. It is needless to say that statements such as this are opposed to all the accepted facts and theories of biological science, which are grounded on the laborious investigations of a long series of trustworthy observers, and will not lightly be overthrown on such utterly inconclusive evidence as that here brought forward. That the spores of Algae do not develop into Worms or Rotifers or Tardigrades, but in a very different manner, is the conclusion of botanists who have spent their lives in watching the development and studying the habits of these plants. The supposition of heterogenesis is no new one; it has been raised several times by superficial observers without ever having gained the least ground; but there will probably always be found persons ready to rake it up just as there is always some one to be found ready to square the circle, prove that the earth is flat, deny the persistence of energy, or maintain the existence of psychic force, and to accuse critics of immorality (vol. ii.

p. 435) because they refuse to renounce the fundamental inductions of their respective sciences. There is not space here to notice more than one of Dr. Bastian's observations described as demonstrating the occurrence of heterogenesis. The whole of the evidence brought forward which bears on what would, if proved to occur, be cases of real heterogenesis, for heterogenesis (mixed up in a hopeless manner by the author with alternation of generations) rests on evidence derived from the supposed existence of every gradation between one form and another, than which nothing is more misleading. The case of the supposed development of a Nematoid worm from a resting spore of Vanherchia, a freshwater alga, is as follows. Dr. Bastian had a specimen of Vanherchia growing in a saucer full of water outside his window. The saucer stayed there some time, and small portions of the plant were repeatedly examined without any Nematoids being seen. The saucer was then taken into a warm room. After four days a number of young Nematoids were found in the water, probably developed from a number of ova present in the water originally, but easily escaping detection from their resemblance to spores, and only hatched on the access of warmth. When further examination was made with the microscope, forms were observed more or less gradational between the resting spores of the Vanherchia and bodies exactly resembling the ova of Nematoids, which bodies developed into Nematoids in the ordinary manner. In such a case as this apparent gradations prove nothing, and this is a typical instance of the way in which mistakes of this kind occur. Why, if Dr. Bastian observed this process of heterogenesis going on to the enormous extent described, did he not fix on individual undoubted Vanherchia spores, and carefully watch their development? He would then have seen his error; but crucial observations such as these lie outside the province of heterogeneity.

Dr. Bastian says that the ova produced by his young Nematoids were much smaller than those within which his young Nematoids were seen to be enclosed, but it may well be that considerable variation in size may exist in the ova produced under various conditions by individuals of the same species.

In conclusion, it should be stated that Dr. Bastian, in order to account for his results, imagines that living matter is endowed with a tendency to develop into certain forms. The wonderful Foraminifera of geological times and the present day, which resemble one another so exactly, were formed originally by archebiosis combined with heterogenesis, and are formed in the same manner now. There is no genetic connection between the two series. Archebiosis and heterogenesis are mere expressions for certain modes of action of the inherent tendency. A number of other terms, also ending in "sis," express other modes of this tendency, many of them being recognised physiological processes known in science by other names. The supposed formation of fungus spores, &c. *de novo* is the result of this "inherent tendency," as is also the development of Nematoids out of Vanherchia spores. As far as Dr. Bastian's idea can be gathered, it is this: living matter is formed *de novo* in solutions by the action of chemical forces. At the instant of its formation, it is endowed with an inherent tendency to develop, and in virtue of that tendency takes the form of spores, e.g. capable of at once developing into perfect Fungi. Or, living matter, having taken a Vanherchia form, is, in virtue of the "inherent tendency," capable of taking the form of a Nematoid. Now it is obvious that the supposition of a tendency such as this would afford no more explanation of the phenomena, were they really existent, than that of a steam-engine principle would of the motion of the steam-engine. A tendency so complex as to be capable of bringing about the

off-hand formation of a structure so elaborate as that of a Nematoid worm has absolutely no parallel amongst crystalline or other forms of physical force. It is of no avail to call such a tendency organic polarity. It could merely be called vital force. It is this same hypothetical tendency in a rather different shape which it is the chief merit of Mr. Herbert Spencer's philosophy to have been able to dispense with, and with which Mr. Darwin will have nothing to do.

H. N. MOSELEY.

WOOD IN THE LIAS.

TO THE EDITOR OF THE ACADEMY.

Broomfield, Sheffield, October 16, 1872.

SIR,—Professor Thiselton Dyer, in his review of Professor Balfour's recent work on *Palaeontological Botany*, alludes to my paper on the occurrence of non-gymnospermous wood in the Lias. As I pointed out in the paper itself, there was some doubt as to the fact of the specimen having come from the Lias; since I did not find it myself, or obtain it from a source on which implicit reliance could be placed. I still continue to look on its origin as a matter of doubt, and until further evidence in proof of such wood occurring in the Lias has been discovered, I should be sorry if any one were to attribute greater weight to the facts described in my paper than I did and do myself.

H. C. SORBY.

Notes of Scientific Work.

Geology.

The Cretaceous Flora of North Greenland.—Among the interesting collections which the Swedish polar expedition of 1870 brought to Europe was a fine suite of fossil plants, collected at the desire of Dr. O. Heer, in Zürich, who in his *Flora Fossilis Arctica* proved that certain black shales at Kome, north of the peninsula Noursoak, belonged to the Cretaceous series. This is now conclusively proved. The specimens brought from Kome are 43 in number, among which Dr. Heer recognises *Filices*, *Rhizocarpaceæ*, *Equisetaceæ*, *Cycadæ*, *Coniferae*, *Monocotyledones*, and *Dicotyledones*. The Ferns are very numerous, *Gleichenia* being peculiarly abundant. The *Cycadæ* and *Coniferae* are also represented by many species, among which *Podozamites Hoheneggeri* is notable, as likewise occurring in the Wernsdorf beds of the Northern Carpathians. Monocotyledons are rare, and only exist as fragments in the collection, while the Dicotyledons also are only represented by a few fragments of leaves, most probably belonging to *Populus*. Such a flora, with a preponderance of *Coniferae*, *Cycadæ*, and *Filices*, and *Gleichenia*, *Marattiaceæ*, *Dicroidium*, and *Cycadæ* in abundance, must be counted a subtropical one. To judge from the presence of *Podozamites Hoheneggeri* and *Eolirion primigenium*, the deposit probably represents the Wernsdorf beds belonging to the Urgonien. This flora has a different climatic character from the Miocene flora of Greenland, in which respect it agrees with the Lower Cretaceous flora of Central Germany. Similar black shales have also been found at the south side of the Noursoak peninsula, near Atane, and at about 800 feet below the well-known Miocene bed. Here also the shales contain plants belonging to a higher horizon of the Cretaceous series. There are 45 species known; among them being *Filices*, *Cycadæ*, *Coniferae*, *Monocotyledones*, and *Dicotyledones*. *Coniferae* are again numerous, but Ferns are rare. Of *Monocotyledones* only a *Bambusium* and two other species are known. The difference between the Atane beds and those of Kome chiefly consists in the great preponderance of *Dicotyledones* in the latter, which, as in the Upper Cretaceous of Germany, are presented by great variety of types. A point of great interest is the discovery in these beds of a beautiful species of fig-tree with leaves and fruit attached. In Central Europe *Dicotyledones* make their first appearance in the Cenomanian, and are very abundant in the Senonian near Aix-la-Chapelle. It is curious that both in Greenland and in Central Europe the *Dicotyledones* display a great variety of types in the Upper Cretaceous series, but are nearly wanting in the Lower Cretaceous. It seems to point to a great change having taken place in the flora between our latitude and 71° N. after the deposition of the Gault. (*Zeitschrift der deutschen geologischen Gesellschaft*, part i. 155.)

The Geology of the Province of Moscow.—Under this title II. Trautschold has published in the *Zeitschrift der deutschen geologischen Gesellschaft*, part ii. 361, an important report on his geological survey of this province, undertaken by the request of the Mineralogical Society of St. Petersburg; a more detailed report in the Russian language is to appear hereafter. The mountain limestone of this district is highly fossiliferous, and chiefly consists of grey limestones alternating with clayey beds; it is usually exposed by rivers, and rarely forms hills; and

though usually horizontal, near Sserpuchof and Kalomna shows an easterly and south-easterly dip: over the mountain limestone lie Oolitic strata. The author explains the absence of Permian, Triassic, and Liassic strata by supposing that during the time of their deposition this region was dry land, and expresses his belief that during the Middle Oolitic period the upheaval of the Ural Mountains caused a depression of Central Russia and its overflow by the sea. The Cretaceous beds of the province are also the most northern deposits of this age in Russia; they are only in part marine, and these are found in the north-eastern portion of the province, the freshwater deposits being confined to the north-western division. They belong to three members of the Cretaceous series, the Gault, Upper Greensand, and Lower White Chalk.

Austrian Geology.—The director of the Austrian Geological Survey, Franz Ritter von Hauer, has printed in the *Jahrbuch der k. k. geologischen Reichsanstalt*, part ii. p. 1, a complete index of all the names of the different rocks, formations, zones, beds, and strata in use in geological surveying, or applied by others to Austrian stratigraphy. By giving the date of the first application of each name, with its author, and an ample description of the stratum or rock bearing it, he has provided a very valuable and handy list of reference for geologists, both Austrian and foreign.

Lower Silurian in Thuringia.—In the *Zeitschrift der deutschen geologischen Gesellschaft*, part i. p. 72, R. Richter gives a detailed description of a group of strata, evidently belonging to the Lower Silurian. Its base is formed by dark slates, which have as yet only yielded Trilobites, two species of the genera *Calymene* and *Asaphus*; large quantities of red haematite occur in these slates. Quartzite forms the roof of this stratum, and bears on its upper side thin beds entirely composed of Brachiopoda shells. The quartzite is covered by further slates, the fossils of which, however, are confined to the accompanying iron ore. In this he found Brachiopoda, amongst which only *Discinae* were discernible. The upper portion of this horizon again is formed of quartzites, in which a species of *Beyrichia* occurs.

The Geology of the Czipka Balkan.—F. Schröckenstein contributes a short paper to the *Jahrbuch der k. k. geologischen Reichsanstalt*, 1872, No. 2, p. 235, on two sections which he has made through the Czipka Balkan, in which he met with the Carboniferous formation, Dyas beds, and Cretaceous strata. The Carboniferous formation, resting on Palaeozoic beds, which, in turn, overlie crystalline rocks, is formed of quartzites, limestones, and shales, and Coal-bearing sandstone and shales, the latter of which immediately accompany the coal-seams. The Dyas formation overlies the Coal-measures in patches, and consists of light-coloured dolomite, red and yellow sandstone, which likewise contains beds of coal. He considers these to represent the Middle Dyas; a mass of grey marls and quartzites, with dark dolomites and limestone, takes the place of the Zechstein. This group of strata then stands between the German Dyas and Russian Permian, and near the Upper division of the former.

On Pteraspis.—In his work on Fossil Fishes, Agassiz pronounced some fossil remains from the Devonian of England to be those of three new species of *Cephalaspis*. In 1847 Kner examined similar fossils from the Upper Silurian of Gallicia, which, like two of Agassiz' new species, he considered to be the inner shells of Cephalopods, for which he proposed the generic name of *Pteraspis*. F. Römer, in 1856, named a similar form, from the Eifel, *Palaeothetus Dunensis*. Mr. Salter, Prof. Huxley, and Sir Philip Egerton afterwards added to our knowledge of these doubtful remains, and they all arrived at the conclusion that they belonged to fossil fish; while Dr. Lankester subsequently described them as such, in a monograph published by the Palaeontographical Society of London. He divides the *Cephalaspidae* into two orders: the *Ostrostraci*, with *Cephalaspis Lyelli*, and *Heterostraci*, with *Pteraspis*, basing his distinction on a difference in the nature of the shells. The *Heterostraci* he has divided into *Scaphaspis*, *Cyathaspis*, and *Pteraspis*. A. Kunth now describes, in *Zeitschrift der deutschen geologischen Gesellschaft*, part ii. p. 1, a new species of *Pteraspis* occurring in the hard Graptolite limestone boulders of the diluvium of Berlin. The specimen possesses a head shield that in every respect corresponds with that of *Cyathaspis Banksii*. The other side is formed by what Lankester calls *Scaphaspis truncatus*. Connecting these two parts, he found a number of plates representing segments. It appears, then, that this is a specimen not of a fish, but a crustacean. Kunth calls this remarkable new species *Cyathaspis (Pteraspis) integer*.

The Trias of the South Bakonyer Wald.—The Trias of the Bakonyer Wald, the eastern continuation of the Alps, consists, according to T. Böckh, of the following strata:—1. *Rhaetic Formation*: a. Dachstein limestone, with *Megalodus triqueter*, &c. 2. *The Upper Trias*, consisting of: a. Central dolomite, with *Megalodus complanatus*, *Turbo solitarius*, &c.; b. The Upper Marl group, comprising: a. Bed with *Avicula aspera*, *Waldheimia Stophani*, &c.; b. Bed with *Trachyceras Attila*, *Trachyceras Bakonicum*, &c.; c. Fureder limestone, with *Halobia Lommeli*, &c.; d. Horizon of *Arcetes Tridentinus*; e. Horizon of *Ceratites Reitzi*, and non-fossiliferous quartzites. 3. *The Lower Trias*, consisting of: a. Muschelkalk, comprising: a. Horizon of *Arctites*

Studeri; *B.* Horizon of *Rhynchonella decurdata*, &c.; *γ.* Forrashegy yellow, bituminous, dolomitic marls; *δ.* Megyehegy dolomite, with *Amm. Balatonicus*, &c.; *ε.* Laminated limestone, with *Myophoriae*, &c.; and *β.* Bunter sandstone, made up of: *a.* Porous Rauchwacke and dolomite; *β.* Thinly laminated shales, sandstones, and marls, with *Myophoria costata*, &c.; and *γ.* Red sandstone with conglomerate. (*Acta magyar Királyi földtanii int. töröknyiböl*, vol. ii. part 2.)

Anthropology.

The Different Periods of the Bronze Age.—Among the papers read at the Archaeological Congress at Bologna, and published in the French journal *Mémoires pour l'Histoire primitive et naturelle de l'Homme*, 8th year, 2nd series, several are directed to the determination of the various stages of development observable in the remains of the so-called Bronze age found in Sweden. These remains had been separated by MM. Nilsson and Worsaae into three classes, each corresponding with some notable peculiarity in the tombs in which they were found: those of the first class, for instance, being found in large stone cists containing one or more skeletons, those of the third class in small cinerary urns, and those of the intermediate class in large stone cists containing calcined bones. The object of the first paper to which we would refer (p. 174) is to illustrate these three varieties of bronze work. The first variety, says M. Oscar Montelius, the author of the paper under notice, is ornamented with linear and spiral patterns, drawn on the mould from which the object is cast. The second variety is less elegant, and ornamented chiefly with concentric circles, which are worked upon the bronze by a tool, not on the mould. The different character of the tombs in which the objects of this class are found suggests the idea of their being the result of some external influence. The third variety corresponds in type with the first, but the two classes are only exceptionally found side by side: celts, for instance, which are very common in this last variety, being unknown in the first. While most of the objects of the third variety are undoubtedly the product of native Swedish industry, there is one, a buckler, or perhaps the lid of a cista, which M. Montelius regards as of Italian workmanship, supposing it to have found its way to Sweden in the course of trade between the north and south of Europe. He must have been led to this conjecture, we imagine, by the border composed of very rude figures of swans, which forms the principal ornament of the buckler, and certainly presents a striking contrast to the ornaments consisting of mere linear patterns which prevail among the northern remains of the Bronze age. It is also true that bronze utensils of various kinds, with similar patterns composed of exceedingly rude figures of animals and even of men, have been found in Etruscan tombs (p. 184; compare *Archæologia*, xli. pl. 4, 7, 9). It may be as he conjectures, but it is difficult to believe that an object so rude could ever be prized by people familiar with work of such nicety and good taste as may be seen in fig. 1 of the illustrations of this paper. On the other hand, there would be no difficulty in accepting his conjecture if archaeologists would permit us to reverse the order of progress which they have laid down in these matters as commencing with mere linear patterns and going on to figures of animals and men. Figures of animals are to be seen rudely scratched on bones found in cave-dwellings, but no linear patterns or ornaments, so far as we remember. It should also be observed that among the Etruscan tombs which have yielded bronze utensils ornamented with rude figures of animals and men, those of Praeneste are regarded as examples of the very earliest Italian tombs. One of the objects found at Praeneste is now in the British Museum, and whether for the purpose to which it was applied, or the ornaments upon it, is equally the subject of surmise. The vases found in excavations at the Campo Santo at Bologna, and engraved at p. 184, give a correct notion of the style of work in question.—A second paper, read at the same congress by M. Hildebrandt, and reported as above (p. 172), is devoted to a comparison of the ancient bronze fibulae of the north of Europe with those of the south, the result being so marked a difference in an artistic point of view that the one cannot be supposed to have originated through any influence of the other. This being the case, M. Hildebrandt proposes that we should look to Asia Minor for a prototype which would harmonize with both.

The Primitive Inhabitants of Italy.—A third paper (reported as above, p. 94), by the learned Count Conestabile, deals with the primitive inhabitants of Italy, commencing with a description of the four successive immigrations of branches of the Aryan race into Europe from their primitive settlements in Bactria and Sogdiana. 1. The Celtic branch, taking a direction south and west of the Caspian Sea, occupying first the regions of the Caucasus, and afterwards advancing along the Danube towards the centre and west of Europe. 2. The Germanic branch, taking a more northerly route, passing through Scythia and Sarmatia, reaching ultimately the shores of the Baltic, and penetrating into Scandinavia. 3. The Slavic race, passing through Sarmatia, taking the route of the Volga, and settling in Russia, Lithuania, Bohemia, Illyria, and Servia. 4. The Aryan-Pelasgic race, leaving the common settlement a little after the Celtic branch, passing along the south of the Caspian, and advancing into Asia Minor and on to the Hellespont,

across which bodies of them passed on two occasions, and spread, on the first, in Thrace, Northern Greece, Illyria, and the north of Italy, while, on the second, they descended into Italy, driving the previous inhabitants to the extreme south. The next immigration of the Aryan-Pelasgic race into Italy took place by sea, the points of landing being Calabria in the south and the mouth of the Po in the north. The last immigrants were the Pelasgo-Tyrrhenian or Etruscan colonists, who came direct from Asia. Between the first incursions of the Aryans into Europe, which are stated to have taken place about the thirtieth century B.C., and the arrival of the Etruscans, a period of about fifteen centuries elapsed. That the Etruscans had attained a considerable influence in Europe by the fourteenth century B.C. may be gathered from the evidence of the hieroglyphic inscription at Carnac, in which a victory is recorded to have been gained at that date by the king of Egypt, over certain confederate enemies "from the islands and regions of the sea," among whose names occurs that of the *Turscha*, which, when we consider that the other allies are spoken of as Lycians, Achaeans, Sicilians, &c., there is no difficulty in recognising to be identical with the archaic forms *Turse*, *Turschen*, *Tuse*. The *Turscha* took the chief part in the expedition. The advent into Italy of colonists familiar, as the Etruscans were, with many forms of industry, and much addicted to commerce, gave no doubt a great impulse to industry throughout Europe. At the same time it is not correct to trace the introduction of working in bronze into northern Europe to the Etruscans alone. For contemporary with them, and rivals in skill in working metals, as well as in commercial enterprise, were the Phoenicians, whose visits to the west of Europe are matters of historical fact.

The fourth volume of the *Transactions and Proceedings of the New Zealand Institute*, conducted by Dr. Hector, has just reached us. The most important papers are as follow:—1. "Ethnographical Considerations on the Whence of the Maoris;" by J. T. Thomson. Mr. Thomson, after incidentally mentioning that native tradition has pointed out the Navigators' Islands as the earlier home of the Maoris, proceeds to base his conclusions on the evidence afforded by physical form, customs, and language. He illustrates his subject by vocabularies of words and numbers and by maps, and arrives at the following results: 1st. That Hindostan as well as the Indian Archipelago contained at one time a Negro population. 2nd. That waves of migration issued from the South Peninsula, or Barata, in both an eastern and western direction. 3rd. That no western emigration ever proceeded out of Tamasak, or the south part of the peninsula of Malacca, or Sumatra, so as to affect Madagascar. 4th. That the progress of the Barata is traceable eastward by language as far as the Moluccas, of which Ternati is the principal settlement. 5th. That the race was modified in colour and physiognomy, but not in language, by the incursions of the Mangians and Anamese. 6th. With the Moluccas as a basis, a stream of the mixed races flowed eastwards, from island to island, over Polynesia—one branch finding its way to New Zealand, via Tongataboo. 7th. Barata, or South India, was, therefore, the Whence of the Maori.—2. "Moa and Moa Hunters;" by Dr. Haast; with notes by the Rev. J. W. Stack. Dr. Haast illustrates his paper with a map of the moa hunters' encampment at the mouth of the Rakaia river, and a plate of implements of obsidian and of chipped stone found in association with moa remains in that locality. The author discusses the evidence of the antiquity of the *Dinornis* at great length, and arrives at the following conclusions: 1st. The different species of the *Dinornis*, or moa, began to appear and flourish in New Zealand in post-Pliocene times. 2nd. They have been extinct for so long a time that no trustworthy traditions respecting their existence have been handed down to us. 3rd. A race of *Autochthones*, probably of Polynesian origin, was contemporaneous with the moa, by whom the huge wingless birds were hunted and exterminated. 4th. A species of wild dog was contemporaneous with them, which was likewise killed and eaten by the moa hunters. 5th. They did not possess a domesticated dog. 6th. They were low in civilisation, only using rudely chipped stone implements; the Maoris, their descendants, on the other hand, had, when the earliest Europeans arrived in New Zealand, attained the art of manufacturing finely polished stone implements and weapons. 7th. The moa hunters cooked their food in the same manner as the Maoris of the present day, but they were not cannibals. 8th. The moa hunters had access to the Northern Island, whence they procured obsidian. 9th. They also travelled far into the interior of the island to obtain flint, of which some of their stone implements were made. 10th. They did not possess implements of nephrite or greenstone. 11th. The art of polishing stone implements is of considerable antiquity in New Zealand, and as they only possessed chipped stone implements, this furnishes an additional proof of the long extinction of the moa.

The Occurrence of Face-Urns in Brazil.—Professor C. F. Hartt has published a drawing and description, in the *American Naturalist* for October, of a well-preserved urn of this kind, from a cave on the Rio Maracá, a little river in the province of Pará. The awkward turning forward of the elbows of the figure—a male one—is remarkable. The urn contains part of a human skeleton, which shows no traces of having been burnt. On the floor of the grotto where this urn was found

fragments of other urns have since been met with; some had a similar shape, others had the bodies of armadillos and tortoises, with human faces. The author has quite recently restored from fragments a female face-urn from the Ilha do Pacoval, in Lake Arary Marajó, the upper part of which is rounded to represent a head with human features, and possesses pieces of another urn which has two faces.

At the third general meeting of the *Deutsche anthropologische Gesellschaft*, held at Stuttgart, Professor Virchow read a paper combating the view pronounced by M. Quatrefages in the *Revue des deux Mondes*, and in a more recent lecture, that the present Prussian people had sprung from a race of Finns. He further endeavoured to show that they received civilisation from the French who emigrated after the revocation of the Edict of Nantes, and that they are anthropologically different from the people of South Germany. A condensed report of Professor Virchow's comments is given in *Ausland*, No. 42, 997. He finds that Quatrefages bases this theory on too scanty material and altogether insufficient grounds. The hypothesis, at one time so universally held, says Virchow, that all longheaded skulls were Celtic, may now be taken as an example of how easy it is to overstep the mark, and of the caution that should be exercised in anthropological enquiries. Any conclusions that may be drawn from the forms of skulls of early times are quite open to question. The influence of culture has hitherto been too little considered. Schaffhausen has observed that the growth of the skull continues to a later period than was formerly supposed, and that it increases in breadth in old age. This explains how it happens that so many more of the long and narrow skulls have been traced to earlier times, and that the proportion of the broader ones increases in the quaternary epoch. In the case of the broad skulls the brain has usually attained fuller development, while the most remarkable long and narrow skulls are to be met with among lower races. For this reason, then, peculiarities of races become obliterated in time.—*Die anthropologische Gesellschaft*, which now numbers 1358 members, will hold its next annual meeting at Wiesbaden.

The *Bulletin de Académie royale des Sciences de Belgique*, No. 7, contains a note by G. Dewalque, announcing the discovery of wheat in a bone-cave in Namur. An exploration of this cave, which is near Jemelle, was made by Professor Cousin, of Louvain, who found some bone implements, together with numbers of human bones. During a later visit more human bones, and a somewhat abundant quantity of wheat, were discovered in a stratum of angular flints. The wheat appeared to have been charred, and though it is decidedly smaller in size than our ordinary grain, the author does not hesitate to affirm that the material he has found is cultivated wheat.

Since our notice (*Academy*, vol. iii. p. 320) of the reports from Zürich of university and medical education for women, a little book has been published giving an account of the legal and professional aspect of the same question at Edinburgh. The writer, Miss Jex-Blake, is one of several ladies who were allowed to matriculate as medical students at that university in October 1869, but the full importance of the concession was not apparently understood by the authorities at the time, and their attempts to withdraw it without legal cause have given rise to litigation which is scarcely likely to end in their favour. The statutes of the university make no mention of the sex of students, and the governing body is consequently free to receive women on the same terms as boys if it pleases, but the practice of centuries is held to have barred the right of women to claim admission if it is refused. Once matriculated, the ladies are entitled to all necessary facilities for study and—which is the point in dispute—have a claim to be enabled to fulfil whatever formal conditions are imposed upon students desirous to graduate in medicine or any other faculty they have selected. The importance of the question being tried at Edinburgh appears from Miss Jex-Blake's book to be that, if that university breaks faith with its *alumnae*, English women intending to study medicine will have to do so either in America, France, Switzerland, or Italy, and as no foreign degrees are legally recognised in this country, and a Paris graduate is placed on the same footing with the most unscrupulous female charlatan, it is to be feared that the actual demand for lady-doctors will tempt unqualified practitioners into the unprotected or unregulated half of the medical profession. The book is worth consulting as a clear and temperate summary of the past history and present state of a controversy that is likely to last some time, and was embittered, as appeared from the newspapers a year or two ago, by the discovery that some of the ladies could compete successfully for open endowments.

New Publications.

- BENTHIN, J. Lehrbuch der Sternkunde. Leipzig : Fleischer.
 CREDNER, H. Elemente der Geologie. Leipzig : Engelmann.
 DE FONVILLE, W. La Physique des Miracles. Paris : Dentu.
 DÜHRING, E. Kritische Geschichte der allgemeinen Principien der Mechanik. Berlin : Grießen.

- EIBEN, C. E. Beiträge zur physiologischen Characteristik der ostfriesischen Inseln und Küste. Emden : Haynel.
 ERDMANN, E. Beskrifning öfver Skånes stenkolsförande Formation. Stockholm : Bonnier.
 HENSEL, R. Beiträge zur Kenntniß der Säugetiere Süd-Brasiliens. Berlin : Dümmler.
 HOUZEAU, J. C. Études sur les Facultés mentales des animaux comparées à celle de l'homme. Bruxelles : Muquardt.
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 SMITH, W., and GROVE, G. An Historical Atlas of Ancient Geography, Biblical and Classical. Part I. Murray.
 STEUR, C. Ethnographie des Peuples de l'Europe avant Jésus-Christ. Bruxelles : Muquardt.
 TREVITHICK, F. Life of Richard Trevithick. Spon.
 ZENKER, W. Ueber die physikalischen Verhältnisse und die Entwicklung der Cometen. Berlin : Hempel.

History.

- GUSTAVUS ADOLPHUS IN GERMANY, and other Lectures on the Thirty Years' War. By R. C. Trench, Archbishop of Dublin. Second Edition. Macmillan.

THIS is practically a new work, though two of the lectures were published seven years ago. We have of late had so little that is worth reading in English on the subject (except Mr. Ward's *House of Austria in the Thirty Years' War*) that this account of the general and social aspects and results of the great religious struggle of the seventeenth century is peculiarly welcome. And yet few foreign events were ever watched in England and Scotland with more interest. The old book called *The Swedish Intelligencer*, published in numbers from time to time, was a remarkable one for that age, and Lockhart's account in the Harleian Miscellany, as well as Monro's, shows how many volunteers from this island were serving in the Swedish ranks. The character of Gustavus has been assailed of late years by some writers on the ground that he was not fighting for religion so much as "for his own hand," and was in fact a self-seeking robber who did much to break up the unity of the Empire. It is true that he had been long alarmed at the Austrian conquests, and still more at their plan of getting a firm footing on the Baltic with a view to rooting out Protestantism from the North. But it is the happiest of all causes when in defending his own nation such a leader is defending also great and universal interests. Such was Elizabeth's war against Spain, and such Gustavus' campaign against Tilly and Wallenstein. It must be remembered that Richelieu,

whose ultimate policy was to humble the house of Hapsburg, had enough on his hands at the moment owing to his unfortunate resolution to destroy the local independence of the Protestants in France, and make the monarchy absolute, when probably conciliation would have given him the command of a splendid force of sailors from Rochelle and the west coast and not inconsiderable help by land. It was at this moment when the cause of North Germany seemed lost that Gustavus Adolphus landed at the mouth of the Oder, with something of the feelings of one of the old heroes raised up to deliver the chosen people from bondage. The Elector of Brandenburg was a miserable incapable—one of the few such whom the house of Hohenzollern has produced ; the Elector of Saxony was, if possible, worse ; Christian of Denmark had failed, not being supported properly by his nephew, our Charles I., who was now involving himself hopelessly in the contest with his own subjects ; Gustavus was the sole remaining hope. Archbishop Trench has not gone at length into the military events, as his main object has been to show the social results of the war of religion on the country. The Jesuits, by influencing Ferdinand II. of Austria and Maximilian of Bavaria to this war, brought on Germany a destruction like that which Innocent III. brought on South France by the Albigensian crusade. We must refer to the Archbishop's book for the details, which he has excellently illustrated from the popular poems of the time, and from the fortunes of the clergy and of the universities, drawing his materials from Opel and Cohn's *Historische Lieder aus dem dreissigjährigen Kriege*, and from Tholuck and others. The list of works given in the preface shows how much has been lately done in Germany for the history ; we may expect soon Mr. Motley's book on the war, which will form the third part of his great work. Meanwhile we would recommend the Archbishop's book as containing an admirable series of sketches on the subject. He has illustrated it from his own special line of enquiry by adducing the new words introduced at this period, such as "plunder" and "marauding," and well brought out the influence of France on the German language during the war, which ended in giving Louis XIV. Alsace as his share of the spoil of the dismembered land, a thing Germany has neither forgotten nor forgiven. He quotes on this a *mot*, ascribed to Ranke. "After the capitulation of Sedan and the surrender of the French Emperor, an Englishman, who thought the war should now cease, asked the historian across a table at Berlin, 'But whom are you making war on now?'—'Louis XIV.' was the reply."

C. W. BOASE.

RECENT EDITIONS IN THE ROLLS SERIES.

REGISTRUM Abbatiae Johannis Whethamstede, Abbatis Monasterii S. Albani, iterum susceptae. Ed. H. T. Riley.—This is one of the Registers of the Abbots of the fifteenth century, the publication of which will complete the series of St. Alban's Chronicles and Documents for which we are indebted to Mr. Riley. Whethamstede's Register used to be ascribed to Robert Blakeney, a chaplain of the abbey, but he was only the possessor, not the author, of the book, which was at a later period the property of Lord W. Howard, more famous as "Belted Will," who mentions his buying it for twenty shillings in 1589. It is now in the Arundel collection of manuscripts at the College of Arms. It was probably a compilation from various sources made shortly after Whethamstede's death by some now unknown hand. No doubt the abbey registers were used for the work, but the abuse poured on William Walingforde, who was the abbot's right-hand man, shows that it came from an alien pen, and it was probably composed just before 1476. The point is important because inferences have been drawn from Whethamstede's supposed authorship. Hallam, for instance, does so towards the close of the eighth

chapter of his *Middle Ages*; and so on the vexed question of the murder of Humphrey, the "good" duke of Gloucester, "Whethamstede" has been quoted as saying that he died of grief and sickness, the abbot being a warm friend of Gloucester. The register contains the account of the first and second battles of St. Albans, 1455 and 1461, in which the abbey suffered so much. This changes the registrar from a violent Lancastrian into a Yorkist. "His change of party is quite sudden and amusing enough." Mr. Riley, however, means to bring these matters under our notice more at length in the introduction to the succeeding volume. We trust the completion of his St. Albans series will be only the middle point of the services which he has rendered to the history of old London and its neighbourhood.

Calendar of the State Papers relating to Ireland of the Reign of James I., 1603-6. Edited by the Rev. C. W. Russell and J. P. Prendergast, Esq.—The unfortunate history of Ireland is well represented in the state of the papers from which this Calendar has been compiled. They are scattered far and wide, and the Master of the Rolls has wisely sanctioned a complete account of them all, instead of confining the task of the editors to the comparatively small collection contained in the Record Office. There are only thirty-two Irish entries in Bp. Stapledon's Kalendar formed during Edward II.'s reign (some of which are illustrated in the editor's preface). There is no notice of any Council Book in Ireland prior to Henry VIII., and most of the later ones have been destroyed. The leading statesmen kept possession of state papers much more than was done in England, and hence the importance of the Chichester, Fitzwilliam, and Ormonde documents, of which Carte the historian had the use : the Conway collection supplies much, especially in the docquets (or summaries) of letters, and of course Sir Robert Cotton, our great antiquary—perhaps not very careful in returning what he had borrowed, as was the way with antiquaries—had added much interesting Irish material to his stores. Of all these, as well as of the Carte and Carew papers, the editors give a very interesting sketch. Some volumes got as far as Philadelphia, and were generously restored by the directors to the English national archives in 1867. The most interesting part of the reign is not yet reached, that of the plantation of Ulster by the new English and Scotch colonies, to illustrate which there were a series of maps of the six escheated counties ; two of which, Derry and Donegal, have unfortunately not yet been found. Those of Armagh, Cavan, Fermanagh, and Tyrone, have been reproduced by photo-zincography and coloured. And we cannot but approve of the editor's plan, to give full details of all lists of names of persons and places, and, in fact, a somewhat fuller analysis of the papers than is given in the English calendars, where it is often provoking to find one person or place mentioned, with an "etc." or "and others" following, when the historical importance of the entry depends on the lists of names concerned with public affairs, conspiracies, and the like. Mr. Prendergast, in especial, has made the subject of the English settlements in Ireland his own, so that we look for considerable historical help from the forthcoming volumes. James tried to pacify the Scotch borders by transplanting the Grahams and other inhabitants of Leven, Esk, and Sark into Ireland, and a subscription was made throughout Cumberland and Westmoreland to procure them convenient farms. It is these details of the social condition of the country which are unfortunately omitted in the ordinary histories of James's reign, while the doings of the favourites Carr and Villiers are chronicled at length. Some day we may have a history of the kingdom as well as one of the king.

Memoriale Fratris Walteri de Coventria. Ed. W. Stubbs, Regius Professor of Modern History in the University of Oxford. Vol. I.—The historical collections of Walter of Coventry having been praised by Leland, our German friends have been constantly urging its publication. Unfortunately the book is a mere compilation, and we already possess what it has to tell us in other forms. It was right to publish it however, for it completes the series of works connected with Benedict of Peterborough and Roger Hoveden, and supplies an interesting instance of that process of abridgment and adaptation by which the successive mediaeval chroniclers provided for the historical wants of their own time, and gives some help towards disentangling the com-

plicated relations between their several works. It also helps us to correct the text of previous authors, e.g. Walter had a better copy of Florence of Worcester before him than our present printed editions supply. It was written, and Walter of Coventry lived, between 1293 and the end of the reign of Edward I.; he probably wrote in the diocese of York (as the local indications seem to show), and used some previous compilation, such as the Harleian MS. 3860, while the coincidences in expression with the extracts from the ancient chronicles published by Edward I. in the great roll (*Foedera*, i. 769) seem to point to the conclusion that the two compositions were drawn up in concert, or the one abridged from the other. Professor Stubbs gives an amusing account of the conjectural way in which Bale and Pits and later bibliographers have evolved a biography of Walter, of whom they knew nothing whatever beyond his name. Modern biographers more ingeniously write a "life and times" of their authors, where "the times" play nearly the whole part. The historical illustration of the period is reserved by the editor for the preface to the second volume, on the appearance of which we hope to return to the subject.

Calendar of the Clarendon State Papers, preserved in the Bodleian Library. Vol. I., to January 1649. Ed. by O. Ogle and W. H. Bliss.—This has been drawn up on the pattern of the Calendars of State Papers in the Rolls Series. The most important of the documents collected by the great English historian were published in three volumes folio, but this calendar supplies many details and some corrections, not only to the published volumes, but to Clarendon's own history. A further acquisition to the collection was made so lately as 1860, when other papers, enclosed in boxes and in Lord Clarendon's private writing chest, were sent by the trustees of the bequest made to the university by the third earl in 1753. "It may be worth observing that in this *escriatoire* are the writing materials used by Lord Clarendon himself—pens, silk, wax, pounce-box, and scissors—just as he left them." The many letters of the king and queen form a valuable part of the collection. Above 300 letters of state, addressed by Queen Elizabeth to foreign princes in the early years of her reign, are calendared as addenda. There are many interesting notices of Hyde himself, and of the preparations he made for his history, which he called "A Book of Martyrs"; the documents show even more than the history the amount of discord among the king's generals, especially in the West. One note states "how odious Lord Culpeper, Sir Edward Hyde, and Lord Hopton are to the commissioners, gentry, and county of Devon generally." On the other hand, there are complaints against Lord Goring for misappropriating and embezzling contributions, and Hyde says of him, "he does nothing but drink and play." There are curious details of the money levied in different parts of the country; in fact, we much want a budget of both sides during the war, the levies of men and money are not at all explained in the common histories; the lists are also of value as showing the relative importance of different parts of the country, which of course differed much from what it is at present. Some of the early entries show Charles' love for art—he procures pictures from Spain, and desires plaster moulds "of the marble heads of Julius Caesar, Marcus Marcellus, and Hannibal, at Aranjuez"; and "Velasquez, the king's painter, certifies that the heads sent are correct, that of Hannibal only being doubtful, there being so few statues of him existing." Now and then we have a note by the editors, such as the following—"Reference is made to this letter in *Hist. Rebell.* book ix. p. 544, but the words and tone are *entirely different* from those quoted there."

C. W. BOASE.

Intelligence.

It was to be expected that the success of the new Imperial University at Strassburg during its first summer term would not be very great. The lectures were attended by no more than 212 students, of whom about 130 came from various parts of Germany, the rest being natives of Elsass. There is hardly a doubt that most of those belonging to the first category will not return for the winter, as they felt rather uncomfortable in the midst of a sulky population, and did not meet that kind of social accommodation to which the academical youth of Germany is accustomed elsewhere. Their successors will probably be better able to accommodate themselves. A short time ago there appeared a similar feeling of discouragement among the professors, though most of them had accepted their new chairs with rather a superabundance of enthu-

siasm. This reaction, as it appeared, was chiefly owing to the fact that Professor A. Springer, the eloquent historian of art, exchanged Strassburg so very soon for a more secure and lucrative chair in the University of Leipzig, whilst Professor Brunner accepted a place in the faculty of law at Berlin. These, however, are occurrences which happen more or less continually in all the other German universities. And it is scarcely just or generous, after a six months' experiment, to give utterance to the suggestion that that of Strassburg may after all prove a failure. It will be time to arrive at an opinion on this point in five or, say, ten years hence, when plenty of evidence will have been collected, whether or no a distinguished corporation, for the most part carefully composed of the best men in the various academical disciplines and richly endowed, has spread its attractions both over cis- and trans-Rhenane Germany. It may not be amiss to remind the Strassburg professors and scholars that the University of Berlin, at the time of its foundation in 1810–11, was attended by 256 and after the War of Liberation in 1817 even by no more than 198 students. Fortunately, with the beginning of the winter term, a second batch of professors will join those who have already entered upon their duties at Strassburg. Prominent among these are: in the faculty of divinity, Dr. Schulz, from Basel, and Dr. Zoepfle, from Göttingen, the author of the excellent book on the history and ceremonies of papal election, which we reviewed a short time ago. Dr. Geffcken, from Hamburg, formerly Hanseatic chargé d'affaires in London and Berlin, has accepted a chair for public law; and Dr. R. Sohm, from Freiburg, will lecture on German and canon law. Among the new arrivals we are moreover glad to notice Dr. G. Schmoller, from Halle, a leading representative of the younger school of political economists in Germany; Dr. A. Michaelis, the author of the great work on the Parthenon, which has lately been so favourably received by English critics; Dr. W. Scheer, of Vienna, and Dr. E. Boehmer, of Halle, the one a rising authority in the history of German, the other in the Romance languages and literatures.

G. Droysen, junior, the author of a very substantial life of Gustavus Adolphus, hitherto professor extraordinary in Göttingen, has been advanced to an ordinary chair of history in the University of Halle, in the place of H. Leo, the well known and eccentric historian and linguist, who is retiring on account of old age.

The faculty at Tübingen was very anxious to fill its vacant professorship of history by calling Dr. Max Büdinger, of Zürich, most favourably known as a first-rate teacher, and learned in almost every branch of ancient and modern history; but the people at Vienna were quicker and decidedly more liberal in their offers than the Suabian authorities, and have succeeded in securing his services. This failure is owing not only to the ignorance, but chiefly to the intolerance, of the timid and irresolute Würtemberg government: Büdinger, with all his sound Christian learning, being unfortunately a Jew.

Contents of the Journals.

Hermes (vol. vii. part 1) has articles on Diogenes, who did service in freeing Athens after the death of Demetrius, B.C. 229; the Roman Senate's days of meeting under the later republic; the inscriptions found by our countryman Wood at Ephesus; the Greek proper names on coins; the family of T. Flavius Alkibiades (among the later Athenian Archons); and an Argive inscription interesting for the dialect and for the account of money contributions reckoned by two standards, Aeginetan and Attic.

Bullettino dell' Instituto (September and October) describes the excavations in the Forum, which were interrupted by so many water-springs (one remembers the fountain of Juturna and the Curtian Lake) that it became necessary to discover the course of the old Cloaca Maxima and clear part of it to let the water run off. The progress of the works has now settled the question as to the limits of the Forum Romanum (Regio VIII.).—An inscription of Smyrna, containing a decree of the Ionian Confederacy, and some at Athens, marking the boundary of the Cerameicus, are also given.

Revue des deux Mondes (October 15) contains good articles on the political and educational views of Rabelais, and Sixtus V.'s church policy in France.—An article on Jerome Bonaparte's kingdom of Westphalia shows how Napoleon destroyed his own work by the monstrous levies of men and money required of his subject kingdoms.

Preussische Jahrbücher (October) describes the political importance of the upper valley of the Rhine in the time of the Emperor Frederick II. At Trifels was the treasury of the empire, close by the Scharzenburg, where Richard Coeur de Lion was imprisoned.—There is a good account of the origin of the Zollverein, which, by bringing about commercial unity, gave a firm basis to schemes of political union.

British Quarterly Review, October, contains an article, by a well-known and unmistakable writer, on "The Goths at Ravenna," describing the historical greatness of the city, and the existing monuments which are the records of that greatness—in the age when the Romans and the Teutonic elements of the modern world stood side by side, and neither had as yet absorbed the other.

New Publications.

- CHABAS, F. Études sur l'Antiquité historique d'après les sources égyptiennes et les monuments réputés préhist. Paris : Maisonneuve.
 DE NERVO, Le Baron. Histoire d'Espagne depuis ses origines. Deux Tomes. Paris : Michel Lévy.
 GIESEBRECHT, Wilhelm v. Geschichte der deutschen Kaiserzeit. 4. Band. Straßen und Weisen. 1. Abth. Braunschweig : Schwetschke.

Philology.

The Study of Philology. [Wie studirt man Philologie? Eine Hodegetik für Jünger dieser Wissenschaft. Von Wilhelm Freund.] Leipzig : Wilhelm Violet.

Tῆς ὀἀπερὶς ιδῶστα. Instead of the whole verse, Herr Freund has placed this fragment as a motto at the head of his book, which it characterizes more aptly than he can have himself intended. A little of everything, but of some things too much in proportion to their importance, of others equally necessary too little, "almost nothing," sometimes indeed "nothing at all." In the introductory "Letter to a Young Friend," it is explained that the book owes its origin to the intercourse between the author and a number of diligent young disciples, brought about by a book published some years ago and advertised on the cover of his present work, an "asses' bridge," as they say in my country, for the matriculation examination, called *Prima*. The enquiries which he had to answer respecting the nature, the character, the extent, or the methods of philological study, suggested to him the desirability of reducing his ideas "upon the best way of turning the all too short three years' course of study to the best account in mastering the abundant subject-matter of philology, into a lucid *Hodegetik*, by the help of which the future philologist, even before the sanctuary of his science opens its gates to him, may yet, while, as it were, in the outer courts of the temple, acquaint himself with its ample chambers and rich treasure-hoards." It cannot be denied that such a book might prove of use to beginners, and, apart from national and local differences, the assistance intended for the young German student might be acceptable to the English one as well. But in the aphoristic and desultory manner in which this introduction is composed, there is nothing satisfactory or complete, unless we except some matters of detail which scarcely belong to the subject, and some general hints which show a just appreciation of the task of contemporary philology. A partial analysis of the contents of the book will make this apparent.

The work is divided into five parts. Of these the first discusses the name, the conception, and the compass of philology (pp. 3-33). It begins with a review of the use of the word φιλολογία by the ancients, to which is appended a very cursory survey of the history of philological studies amongst them and amongst the moderns since Petrarch. There is just as little reason for the omission of the name of Zenodotus before those of Kallimachus, Eratosthenes, Aristophanes, and Aristarchus, as for the fact that amongst the literary notices the πώakes are referred to in connection with Krates of Mallus, the head of the Pergamite school, and not *d propos* of the Alexandrines. It is not a historical certainty that Varro composed 74 different works (pp. 8 and 96), but only an inference from Ritschl's calculation, though, no doubt, an inference which approximates very closely to the truth, and the same may be said of the total (620) given for the number of volumes in which these works were contained; in fact, the latter statement requires qualification, as a fresh revision of the MS. catalogue of Varro's writings shows the *imagines* to have comprised only 15 instead of 51 books. The subject also of several of the last books of the *libri disciplinarum* of Varro is only determined with

approximate accuracy in Ritschl's admirable researches. But in a book destined to serve as an introduction to the temple of scientific truth, none but certain and uncontested information should be conveyed, except with the qualification of a "perhaps;" a "query (?)" in this case would have been enough, but it was also indispensable; and the same may be said of the date ("about 470 A.D.") assigned to "Marcianus," or, as it is usually written after the best authorities, Martianus, Capella. This summary, from the revival of the study by Petrarch down to F. A. Wolf, occupies little more than three pages. Of the latter, as the founder of the science of antiquity as a united whole, a more detailed account is given, and, as befits the purpose of this work, chiefly in the form of extracts from his exposition of the Science of Antiquity, from which the author's fundamental principles are derived (pp. 14-28). With disproportionate brevity, in less than two pages, and without even a reference to other sources of information, the author alludes to the modifications which the Wolfian system has undergone in the hands of Boeckh, O. Müller, and Ritschl, without making the slightest reference to the approaching publication of Boeckh's *Lectures on the Encyclopaedia of Philology*: this is followed by a similar skeleton excerpt from Fr. Haase's excellent article, "Philologie," in Ersch and Gruber's *Encyklopädie*, which is also to be reprinted shortly in the proposed edition of Haase's *Kleine Schriften*, where it will be more easily accessible to the general run of readers. The second part of the work is intended to supplement this summary view from the systematic side (the separate branches of philology, pp. 33-56), and the fifth part completes the historical side of the subject, "the masters of philological science in ancient and modern times" (pp. 89-139). As to the former, it must be acknowledged that the author assigns their just importance to the advances which have been made in the study of language; he gives due emphasis to the want of a standing-point from whence the general results of comparative philology can be embraced; he recommends the study of Sanskrit, and he refers to the Italian dialects: but here this section of the subject comes to an end. Not only is the study of the Greek dialects completely disregarded; not a word is said of the cultivation of the special grammar of the two classical languages, in the course of which discussion, besides the general philological standpoint already referred to, the importance of the historical standpoint for the study of grammar ought to have been pointed out, as would have come naturally in the author's way, since he expressly refers to the workers in the field of Roman inscriptions, and the linguistic importance of their labours. Here too we miss all reference to the corresponding researches relating to Greek inscriptions, while a special supplement (II.) actually contains some of the oldest Latin inscriptions, certainly the last place in which we should naturally look for them. Appendix I. gives an extract from F. A. Wolf's *Life of Körte* about Wolf's inscription as "studiosus philologiae" at Göttingen; III. Wolf's sketch for the proclamation of the opening of the philological seminary; IV. The most important parts of Niebuhr's well-known *Letters to a Young Philologist*; all three are more in place here than the above-mentioned second supplement. In the like sporadic, fragmentary, altogether unsystematic manner, there follows a hasty review of the remaining departments of the study, which are, according to the fancy of the moment, either superficially sketched in, or merely alluded to, or sometimes left out altogether; for instance, the author omits altogether to characterize the scientific problem to be solved by the history of literature, and dwells instead on the importance of studying the fragments and in general all the works of the classical authors.

A short sketch of Greek chronology is given, which, again, seems somewhat out of place, while that of Rome is omitted on the ground that the most important points are supposed to be already known. The recommendation not to neglect the study of archaeology commands assent, but what is said upon the subject is more than meagre. In conclusion, hermeneutics and criticism are disposed of in a couple of pages, the so-called "higher criticism" being in fact altogether left out of consideration, and, finally, though archaeological hermeneutics are noticed, archaeological criticism is not.

It would lead us too far to criticize the other two parts of the essay in as much detail as this section. The second contains (pp. 56–62) a "division of the philology student's work amongst six (half-yearly) terms." The value of this section, apart from every other consideration, must necessarily be very uncertain, because, as the author himself admits, the local circumstances of different universities must interfere with the realisation of all the practical advice he gives. Indeed, it may be doubted whether there is a single university in Germany where a student who, as the author rightly requires, extends his interest to the study of language in general, to Sanskrit, and archaeology, could go through a complete course in the time proposed. A fourth section, "the library of the philology student," is well suited to the plan and purpose of the work, giving a succinct account of the most important editions and other aids to philological study. But here too the most necessary works are sometimes omitted (as under the first heading, "Encyclopädisches," the one comprehensive *Encyclopædia* of philology by Bernhardy is left unnoticed), obsolete ones are quoted, e.g. Moebius's edition of the fragments of Anacreon, and the Bipontine of Macrobius, whilst more recent editions are overlooked. In such a choice the subjectivity of the chooser naturally asserts its rights, but we may be prepared to allow this, and yet feel some surprise at finding only the so-called "great" Buttmann mentioned amongst Greek grammarians; amongst works on the history of Roman literature, only Bernhardy and Teuffel, without Bähr or the compendious *Outline* of Hübner, which is so peculiarly adapted to the use of students attending lectures; amongst editions of Sophocles, Schneidewin-Nauck and even Wunder, but not Wolff; the Sophocles lexicon of Dindorf, and not that of Ellendt-Genthe, not the most recent corrections of the text of Euripides by Kirchhoff and Nauck, and for Aristophanes only Bergk, but not Meineke. In like manner we miss the most recently revised texts of Catullus, Pomponius Mela, Censorinus, Macrobius, of whom, as has been observed, only the Bipontine edition is mentioned; we miss the *Juvenal* of Jahn, though, besides Heinrich and Ribbek (*sic!*), Ruperti and Weber are noticed; we miss the *Livy* of Madvig-Ussing, which should have been named along with Weissenborn's and my text, &c.: to say nothing of many other inaccuracies, the most laughable of which, "Magni Aurelii Cassiodori Opera, cum notis Rothomagi, 2 vols. Venet. 1729," we would willingly attribute to the printer (τρυπτηρίς and ὀκταρητής for τρυετηρίς and ὀκταετηρίς, p. 49, may perhaps be laid to his charge), were it not traceable to F. W. Wagner's *Outline of Classical Bibliography*, a careless article of which has been thoughtlessly copied. On the whole, then, the book, in its present form, in spite of some just views and some useful, if not always well-timed, information, in spite of occasional hints well worth laying to heart, yet cannot, all things considered, be characterized except as a failure. After such a precursor, we look with redoubled anxiety for the appearance of Boeckh's *Encyclopædia*, but there would be room by the side of that for a shorter introductory outline calculated for the practical requirements of students if such a work were at once less

unequally and more solidly executed than the one addressed to Herr Freund's "young friend."

MARTIN HERZ.

The Irish MS. of St. Gall. [*Reliquie celtiche*, raccolte da Costantino Nigra. I. Il Manoscritto irlandese di S. Gallo. Firenze; Torino; Roma.]

THIS first part of M. Nigra's work has been got up in the best Italian fashion, and consists of 52 pages quarto, exclusive of some corrections, and four photolithographic plates illustrative of the various handwritings contained in the MS. The text of the latter comprises a little more than sixteen books of Priscian's *Latin Grammar*, copied by Irishmen some time in the course of the earlier part of the ninth century. The importance of the MS. attaches, however, not to Priscian's work, but to the numerous glosses, both marginal and interlinear, with which it is interspersed: some of these are in Latin, but the greater number in old Irish. In the introductory chapter M. Nigra discusses at length the date of the codex and other matters connected with its history, quoting, among others of its miscellaneous contents, a Latin hymn in praise of Guntarius, elected archbishop of Cologne in the year 850, as well as eight ogmic inscriptions, of which the first is in Latin. M. Nigra reads it, *feria Cai hodie*; nor is the second less Christian: it reads, *fel martain* (= *feria Martini*), erroneously deciphered by Zeuss as *fel martaen*. *A propos* of Zeuss, the foot-notes throughout teem with indications of his misreadings; the most serious of these was perhaps his having overlooked the difference between *n* and *m* in contractions.

Next come the glosses themselves and the author's notes on them. He tells us that he has only made a selection from the glosses; and it is to be regretted that he has not been able to publish them all. This part of the work seems to have been executed with his usual clearness and ability, though Irish scholars may possibly not agree with him on every point. To this we may add, that, in the course of the glosses, and his remarks on them, a good many points of considerable interest to the student of comparative philology are brought into relief. Among them we may mention the close relation between the Celtic languages and those of Italy and Greece, as shown in the word *ingen* (*erba ingen* gl. *ungula*), Welsh *ewin* (probably for **inguin*), as compared with *unguis* and *ungula*. As to the question of *c* versus *p*, it is well known that Celtic *qu* gives in Irish *c*, and *p* in Welsh, which some less accurately state by saying that Welsh changes *c* into *p*; and it is seldom kept in mind that the deviation has not always taken place on the Welsh side, though the change in Irish of *p* into *c* is demonstrated by the words *caille*, *caisc*, *clim*, *cruimther*, *corcra*, *cuite*, from *pallium*, *pascha*, *pluma*, *presbyter*, *purpura*, *putens*, respectively. To these data the St. Gall MS. adds (p. 34) one more item, *hi claudi* (gl. in *planta*). Page 22 offers, in the words, "*is gann in memr. et a scribend* (est difficilis membrana et ejus scriptura)," an instance of a curious borrowing from Latin, common in a few cases to Welsh and Irish; thus *scribend* is identical with Welsh *yscritfen*, both from *scribendum*; so *legendum* gives Irish *legend*, Welsh *llcen*; and Irish *oifrend*, Welsh *offeren*, "mass," comes from *offerendum*. To these we may add Welsh *cystrawen*, "syntax," from *construendum*. Of special interest to Welsh philology is the author's deriving *tachtad* (gl. *angens*)—one of the many Celtic instances which we could wish Johannes Schmidt to have had ready to hand when he wrote his contribution *Zur Geschichte des indogermanischen Vocalismus*—from the "rad. ang, orig. AGH." On Irish ground the initial *t* is acknowledged as representing the prefix *do* in such cases: thus *do-achtad* probably became successively **dohachtad*, **d'hachtad*, *tachtad*. Now in

Welsh *tachtad* is *tag-u*, "to choke;" but hitherto the possibility of *do-* becoming *t-* in Welsh has perhaps never been thought of, though it is not very uncommon to find *dh* making *t* in Welsh—as, for example, in *parotoi*, "to prepare," from *parodhau*; *pyscota*, "to fish," from *pyscodha*, and *Betws* from old English *bedehus*, "a bead-house." On page 43 we have a still more convincing instance in *tocad* (gl. *fors*), as compared with *agad* (gl. *fors*), and with the Welsh *tynged*, "fortune" or "destiny." It would have been satisfactory to know what the author makes of the *d*, instead of the more usual *th*, in such passive forms as *gainedar* (*nascitur*), p. 43; *arasisedar* (*annititur*), p. 49; and others which occur in these glosses: in the *Gram. Celtaica* such forms have been stowed away among those with *th* without any apology. Of course it may be that the old Irish, like the old Welsh, sometimes wrote *d* for *th*; on the other hand it may be that the *d* is of old standing in the words referred to. The latter view would facilitate the equation of Welsh passives with those of the Irish: thus the derivation of Welsh *genir* (*nascetur*) would be **genidir*, **genindr*, *genir*, the elision of the *d* having been effected as in *cader*, "a chair," from *catheira*, or of *g*, as in *pelerin*, "a pilgrim," from *peregrinus*. J. RHYS.

INDIAN MANUSCRIPTS.

TO THE EDITOR OF THE ACADEMY.

Mangalore, S. Canara, Madras Presidency,
September 12, 1872.

SIR,—Since I last wrote to you from Tanjore, the Government has transferred me to another part of the Presidency, South Canara. This province is interesting to a philologist, as here the Neo-Aryan and Dravidian languages meet, and the numerous dialects well deserve attention. I have no leisure for this myself, but have begun to print a series of specimens consisting of translations of Matthew xiii. verses 1-35. They will be done by natives, if possible, and will be quite trustworthy. The first (already printed) is in the southern dialect of *Konkanī*, spoken by the Catholic Christians of S. Canara; it is by a native priest, and is in the Canarese character, and also in the modification of the Portuguese alphabet, introduced before 1600 by the Goa Jesuits. The succeeding parts will give specimens of the *Māppila-Malayālām*, *Coorg* language, *Badaga* (on the Nilagiris) and other dialects as yet quite neglected. The Catholics and Muhammedans are very numerous on this coast, and I prefer their idiom to that of the Brahmans, as the latter by introducing pure Sanskrit words in great number completely destroy the character of these dialects. Each specimen will be transcribed in Lepsius' Standard Alphabet. The Basel missionaries very kindly assist, so I hope to be able to print an interesting series of these specimens.

I am seldom able to leave Mangalore, but during the Easter holidays I made an excursion with the Rev. J. Hesse to Mūdabiddri, a great Jain town in this district, and the residence of a famous *ācārya*, who received us with much civility in his convent (*māṭha*). He had sent for a Brahman, to speak Sanskrit with me, as I do not speak Canarese, and he himself (he said), being upwards of forty years of age when he became an *ācārya*, had no time to learn Sanskrit. He showed us all his MSS., about 100 in number, all old and very correct, but unfortunately written in the now almost forgotten *Hala-kannada* character, and so it is necessary to train a copyist to transcribe them. My friend devoted himself to the Canarese MSS. and found nearly all the poems of Hampa, one of the oldest Jain poets who wrote in Canarese (before the eleventh century), and as yet only known by quotations; they include a *Bhārata* and a history of Rāma! I looked over the Sanskrit MSS. and found a very good and complete copy of Yaxavarman's commentary on Ākātayana's grammar; also Candrasūri's *Prakriyāsangraha* to the same. The Southern Jains are *Digambaras*, and their books are almost exclusively in Sanskrit. I found, however, a very interesting MS. in Prākrit, the *Atṭha-pāhuḍaka* (i.e. *prābhritaka*), consisting of *Gāthās* with a Hindi commentary. I find by this that the *Nirgranthas* (mentioned by the Chinese travellers) were Jains and not Brahmans. The stifling heat, however, soon compelled us to leave the *māṭha*, and we then visited the sixteen *vastis* (Jain temples) in the town. I heard that in one of these an immense number of MSS. had been walled up during

the troubles caused by the Muhammedan invasions in the last century, and had not since been taken out. The managers of the temple at first denied, but at last admitted, this report was true. I have only quite recently been able to get them to break down the wall and take the MSS. out. When this was done, more than 200 were found reduced to dust, but a number still remained uninjured. I have a list of more than 100 MSS., and among these are some treatises on *Nyāya* and grammar, and a commentary on the *Kātantra*, which appears to be by a Jain.

The managers also have sent me word that there are many other MSS. relating to the Jain and to the *Rasa* doctrine (which must be the *rāsavrā* system of the *Sarvadarśanasāṅgraha*, p. 97, &c.), but that it was not fit that the names of these books should be written down, or the books shown to anyone except myself, and that I might see them if I would go there again. This I intend doing shortly.

The *Çringēri-māṭha* founded by a *Çaṅkarācārya* is at a distance of a few days' journey from here, but above the ghats. Sanskritists are not aware that the great commentator on the *Veda*s, Sāyaṇa (more correctly Sāyanna), was one of the *gurus* of this *māṭha* by the name of Vidyāranyavāmin. This last name occurs in the list given by Wilson (*Collected Works*, edited by Rost, i. p. 201, note), and in another list that I have recently procured he is described as "the great saint and *guru*, the founder of Vijayanagara, author of the commentary on the *Veda*s and other [books]." The present "guru of the world" will not show himself to Europeans, but I hope, nevertheless, to be able to find out if there are any autograph MSS. of Sāyaṇa at *Çringēri*. It would be of much use if I could learn even what character he used to write his works. Inscriptions show that at this time only two characters were in use in the Vijayanagara kingdom: the old Canarese (which he probably used) and the Nandināgarī, now peculiar to parts of Mysore.

I have lately made a discovery that the lists of *gurus* of the numerous *māṭhas* can be made the foundation of a real chronology of the later Sanskrit philosophical literature. These *māṭhas* are numerous in the South of India, but I have found that all belonging to any one sect are branches of one or two original foundations, and owe their origin to the peculiar rule of succession which is followed by the *gurus*. This rule is that there is only one *guru* at a time, and that when he supposes his death is at hand, he must appoint a successor (of course, a nephew or relation) by communicating to him the *mantra*; if, however, after doing so he recovers, the recently initiated *guru* has to leave and establish another *māṭha*. As lists of *gurus* are preserved in every *māṭha*, a comparison of these shows at once the date of the foundation, for all the lists go back to the first *guru* of the original foundation, and agree up to the date of the division. Most of the later philosophical treatises are by such *gurus*, and, as the author always mentions his predecessor's name, it is easy to find where and when he lived.

The Rev. J. Kittel has recently published a critical edition of the *Cabdamanidarpana*, a Canarese grammar, of about the tenth century. The author (Keçava) uses some technical words from the *prātiçākhyas*, and mentions many Canarese and Sanskrit words, among others a collection of Vedic roots by one Bhīma. Mr. Kittel is also much occupied with Canarese lexicography. Dr. Caldwell is engaged upon a new edition of his excellent *Comparative Grammar of the Dravidian Languages*.

A. BURNELL.

CONINGTON'S PERSIUS.

TO THE EDITOR OF THE ACADEMY.

Harrow, October 17, 1872.

SIR,—Mr. Simcox says at the end of his review of Conington's *Persius* (*Academy*, vol. iii. p. 398), "it is to be wished that in a second edition some errors of the press may be corrected, and one or two obvious incompletions either supplied or removed; e.g. vi. 11, we have the following: 'Homer's revelations, however, turned on the doctrine of metempsychosis, he having been a peacock at one stage of the process (note on Prol. 3)'; where there is not a word about peacocks. Is it barely possible that Mr. Conington suspected an allusion to the fable of the daw and the peacock at Prol. 13?"

The oversight is less serious than Mr. Simcox supposes; the only error being that the note on Prol. 3 is referred to instead of that on Prol. 2, where the supposed words of Homer, "memini me fieri pavum," are quoted and illustrated.

H. NETTLESHIP.

Intelligence.

E. Osenbrüggen's edition of Cicero's speech *Pro Milone*, which originally appeared in 1841, has been revised by Dr. Hans Wirz, whose commentary may be pronounced to be the most accurate now extant on this speech. The edition in its new shape may be especially recommended to young philologists and to masters at public schools. It is published at Hamburg, by W. Mauke.

The style and diction of Apuleius have been carefully investigated in an elaborate work by Professor H. Koziol (Vienna, Gerold's Sohn). It contains the most painstaking account of African Latinity we have yet seen. We are sorry to add that from the author's investigations it appears that Dr. Eysenhardt cannot always be trusted in his collation of the Florentine MS. In the same way the edition of Ammianus Marcellinus by the same scholar has been attacked by several scholars of great authority, especially by Th. Mommsen and A. Kiessling. A new edition of this important writer is in preparation by V. Gardthausen, of which we may augur well from the dissertation containing *Coniectanea Ammianeae Codice adhibito Vaticano* (Kiel, 1869) and recent papers in Fleckens's *Jahrbücher*.

The first part of an edition of Cicero's *De Finibus*, with German notes by Dr. D. Böckel, has been published by Messrs. Weidmann, another edition of the same work by Dr. Holstein being advertised by Messrs. Teubner. A new edition of the *Zosulans* by Dr. Meissner (Leipzig, Richter und Harrassowitz) has also just appeared. We can only say that both paper and printing of this edition are even worse than they generally are in German books. Is it indeed impossible that German publishers should learn to get up their books decently?

Dr. E. Hiller's monograph on the fragments of the poems of Eratosthenes has just been published by Messrs. Teubner. The editor appears to be a genuine pupil of O. Jahn. He has succeeded in filling above nine sheets with discussions on three pages of fragments.

In the *Library of the Earliest Monuments of German Literature*, now publishing at Paderborn (F. Schöningh), Dr. E. Sievers has just edited Tatian's *Synopsis of the Gospels* in the Latin and the German text with an elaborate glossary.

Professor Jac. Bernays, of Bonn, has just published a German translation, with explanatory additions, of the first three books of Aristotle's *Politics*. His book may be considered both an elegant translation and an excellent commentary on the Greek original.

Professor O. Ribbeck, the editor of Virgil (against whom some of the last papers of the late Professor Conington were directed), has now left Kiel, and will this winter begin to lecture at Heidelberg.

A very interesting and important discovery has recently been made at Paris of the correspondence of a Greek called Stamati, containing most minute and graphic accounts of the events of the French revolution, addressed to Prince Michael Soutsos of Roumania. This voluminous correspondence has been placed by General Trochu in the hands of M. Jules Loir and M. E. Legrand, who have just published a first specimen, *Documents intitulés sur l'Histoire de la Révolution française* (Paris, Maisonneuve). Stamati's letters, written in January 1793, alone fill fifty-five pages. An appendix contains letters written by other agents of Prince Soutsos at Vienna, Berlin, Warsaw, and Constantinople, which are likewise in General Trochu's possession. It is to be hoped that the whole of these interesting letters, which enable us to follow the course of events day by day, will be given to the world in a French translation. We are not particularly anxious to see the Greek originals printed, as they are written in the worst slang of the Phanári, and as these valuable documents would still remain comparatively unknown and unappreciated, were they only published in a language unintelligible to many. M. Legrand has, however, proved in the specimen now before us that he knows how to turn Stamati's Greek into delightful French.

Professor Möbius' brochure, *Ueber die altnordische Sprache* (Halle, Buchhandlung des Waisenhauses)—originally read before the 28th Congress of Philologists at Leipzig—which treats of the history of the Scandinavian languages, their relations to each other and the Germanic languages generally, their literary monuments, and the various principles followed in editing these monuments, is of great value to all students of these languages, giving, as it does, a clear, brief, and comprehensive summary of the latest results of Scandinavian philology, and references to all the more important works (often little known out of Scandinavia) on the subject.

The last number of the *Transactions of the American Philological Association* for 1871 contains two important criticisms on Mr. Ellis' *Early English Pronunciation*. Professor March considers the evidence of the Old-English stave-rime, in which *hl*, *hn*, *hr*, *kw* alliterate with single *h*, and *wl*, *wr* with single *w*, as conclusive against Mr. Ellis' assumption of a single sound (*lh*, *hw*, &c.) for all these digraphs. Mr. C. A. Bristed accepts the general results of Mr. Ellis' investigations, but regards "palaeotype" as somewhat cumbersome and overdone, and criticizes many details, giving incidentally a good deal of valuable

information, especially on modern Spanish, with its remarkable dropping of final consonants. In many of his criticisms Mr. Bristed has fallen into the common error of assuming that the pronunciation of a given language is something that can be fixed absolutely, instead of being, as it really is, subject to indefinite variations. In some cases also we cannot help thinking that his phonetic analysis is either inadequate or positively incorrect.

The *Grammar of the Sindhi Language, compared with the Sanskrit, Prakrit, and the Cognate Indian Vernaculars*, by the Rev. Dr. Ernest Trumpp, has been printed by order of Her Majesty's Indian Government, who have secured the valuable services of Dr. Trumpp for the translation of the Sikh Granth.

Dr. Hermann Grassmann's *Wörterbuch zum Rig-Veda* is now rapidly passing through the press, and will consist of about fifty sheets, to be completed in eighteen months.—*Triibner's Record*.

Dr. C. Fr. Koch, the author of the *Historische Grammatik der englischen Sprache*, died of typhus, at Eisenach, on the 5th September. Dr. Koch has left rich materials, which will remain useless, as his repeated requests to be pensioned, so that he might devote his remaining years to the completion of his important labours, were not heeded.

A new classical and philological review (*Rivista di Filologia e d'Istruzione classica*) has been founded at Turin; it is conducted by M.M. Pezzi and Müller, and the first two numbers seem to augur well for the revival of interest in such studies where they should certainly be most at home.

Contents of the Journals.

Grätz's Monatsschrift (Jewish), August and September.—Perles' papers on Rabbinic language and antiquities (conclusion).—The 58th Psalm explained; by the editor. [Ingenious emendations.]—The Targum on the Psalms; by W. Bacher.

The Phoenix, April to August.—Linguistic articles:—Extract from a Japanese Historical Romance, in Roman letters; with translation.—Practical Lessons in Japanese; by the editor (Rev. J. Summers).—Bibliographical Notes on Chinese Books; by W. F. Mayers.—On the Aborigines of the Himalaya, with comparative vocabulary; by B. H. Hodgson.—Notes on the Chias or Ilkyens (collected in the district to the west of the Irrawaddy), with vocabulary; by R. F. St. A. St. John.—Mongol and Turkish Vocabulary (from the great Russian work of Pallas).—The important series of papers on Buddhist Philosophy, by B. H. Hodgson, is now reprinted in full, and will soon be published separately.

Journal Asiatique, No. 72.—M. Renan's Annual Report. [A survey of Oriental literature in France, interspersed with excellent suggestions of criticism. It concludes with a warning against those "scientific Phrasées" "qui . . . n'accordent le bénéfice de la solidité qu'à la science qui s'étale avec ostentation."]

Hermes, vii. pt. 2.—C. Curtius gives a revised text of a long inscription from Sestos, with an elaborate commentary. This inscription is in the collection of Mr. Calvert, American consul at Constantinople, and has been several times edited, a copy of it having been privately circulated by Mr. Greaves in 1866. It is in honour of one Menas, and belongs to the second century B.C.—U. Willamowitz-Möllendorff has some good criticisms on twelve passages from Attic comedy.—U. Köhler (secretary to the Prussian embassy at Athens) edits two more Attic decrees, one of which is interesting as bearing upon the δέκα δέκα σεβόλων.—Th. Mommsen discusses the relation between the Vatican MS. of Ammianus and the text of Accursius (1533).—M. Haupt continues his *Coniectanea*.—H. Jordan discusses various vulgar forms and expressions found in Latin inscriptions which relate to the builder's art.—W. Dittenberger endeavours to prove a point of importance to Attic chronology, viz. the date of the "First Visit" of the Emperor Hadrian to Athens, which was adopted as an era.—R. Schöll brings a heavy charge against the good faith of M. F. Lenormant, as having forged a number of Attic funeral inscriptions. Certainly they have much in them to awaken the suspicions of one accustomed to such documents; and the learned Prof. Kumanides, of Athens, has already expressed his doubts (*Ἄρτιος ἐπιγραφαὶ ἑπτάμυθοι*, p. 18 and 446, reviewed a short time ago in the *Academy*—vol. iii. pp. 158, 159).

New Publications.

BENICKEN, H. K. Das elste Lied vom Zorne des Achilleus nach Karl Lachmann aus dem 12^{ten} Buche der Ilias. Barmen: Steinhaus.
BERLINER, A. Pletath Soferim; Beiträge zur jüd. Schriftauslegung im Mittelalter u. s. w., aus handschriftl. Quellen. Breslau: Schleiter.
LUZZATTO, S. D. Grammatik der biblisch-chaldäischen Sprache u. des Idioms des Thalmud Babli. Mit Anmerkungen von Dr. M. S. Krüger. Breslau: Schleiter.
MEUNIER, F. Études de Grammaire comparée. Paris: Maisonneuve.

ERRATA IN NO. 58.

Page 388, col. 1, line 5 from bottom, for "Houdog's" read "Houdoy's."
" 399, " 2, " 30, for "Tödrös" read "Tödrösi."

THE ACADEMY.

"INTER SILVAS ACADEMI QUÆRERE VERUM."

Vol. III.—No. 60.

Readers are reminded that the mention of New Books, Articles, &c., in our lists is intended as a guarantee of their importance. The Editor of THE ACADEMY cannot undertake to return communications which are not asked for.

The Editor cannot reply to questions from authors respecting the notice of their books.

The next number will be published on Monday, December 2, and Advertisements should be sent in by November 27.

General Literature and Art.

Translations from the Popular Literature of the Turkish Races in Siberia and the Steppes. [Die Sprachen der türkischen Stämme Südsibiriens und der dsungarischen Steppe. Von Dr. W. Radloff. I. Abtheilung. Proben der Volksliteratur. Uebersetzung. 4 Bde. (Also, with the separate title: Proben der Volksliteratur der türkischen Stämme Südsibiriens. Gesammelt und übersetzt von Dr. W. Radloff.)] St. Petersburg: 1866-72. Buchdruckerei der kaiserlichen Akademie der Wissenschaften.

ONE of the chief merits of the Imperial Academy of St. Petersburg is that it occasions the publication of learned works which might never see the light without its assistance, or might, at any rate, be lost to science for an indefinite time. Not to mention any other branches, our knowledge of the north of Central Asia is almost entirely due to the learned societies of Russia, and especially to this academy. The careful researches that have been made into the language and literature of the tribes of that region, which is for the most part subject to the Russian crown, were either undertaken at their suggestion or else the works bearing on the subject were published at their expense, and in many instances both was the case. Without leaving the present subject, I may instance the attractive and instructive *Helden-sagen der Minussinschen Tataren*, which were collected by Castrén and Titow, done into metre by the distinguished linguist, Anton Schieffner, and published under the direction of the St. Petersburg Academy in 1859. This translation, like Radloff's work, is in German, in which, as well as in French, a considerable number of the academy's publications are composed. Schieffner's work may serve as a very welcome introduction and commentary to that part of Radloff's which deals with the epic poetry of the Turco-Tartars, though the remainder includes as well tales, legends, fables, historical ballads, songs, proverbs, in fact everything that is designated by the general term Folk-lore. As to the ground covered by the four volumes before us, I have to observe that the first two include the literary productions of those inhabitants of the Altai and the adjoining eastern districts, who still adhere to Shamanism, the Tartar tribes about Minusinsk being included under the latter head; while the third and fourth volumes contain the popular literature of those Turco-Tartar tribes which live west of the Altai, and now profess the faith of Islam, that is to say, the Kirghiz hordes together with the tribes dwelling on the river systems of the Tom, the Irtysh, and the Tobol, who are known by the general name "Siberian Tartars." While the Shamanite Tartars consist of the remnants of various tribes who live mixed together, and have quite lost the feeling of nationality, so that they call themselves either by the name of the clan

VOL. III.—NO. 60.

or after the mountains and rivers by which they live, the inhabitants of the wide Steppes (reaching from the Altai to the river Ural, from Omsk to the mountains on the northern boundary of the valley of the Serafshan, who call themselves *Kasak*, and by the Russians and other Europeans are wrongly called Kirghiz, or even Kirghiz-Kaisaki) are members of a single race, or rather nation. Of its origin little is known. Their tribal names seem to show that the Kirghiz hordes consist of the most various elements, as, for instance, the names Kyptschak, Argyn, and Naiman (which is incontestably of Mongol origin); but the amalgamation in this case seems to have been completed long since, as the Chinese began to speak of the Ha-sa-ki many centuries ago. Now they certainly form a closely welded whole, exhibiting every token that belongs to national unity. As for their religion, the Mahometanism of the greater mass consists merely in external observances; thus it is strictly enjoined to cut the hair and wear a covering on the head, and it is thought proper, especially for old people, to make use of pious expressions borrowed from the Koran, yet a thorough or familiar knowledge of the faith is rare. But a strong national spirit distinguishes them from the other Turkish tribes; their manners, language, dress, and usages, are as much one as the wide steppe, with its unvarying character, which they inhabit. They themselves divide their literary productions into two classes, the words of the people and book-songs. The people's words (*Kapa cök*) are songs and narratives preserved by oral tradition, and therefore the work of that portion of the population least affected by Islam. They are only known to the unlettered, for the Moullah, that is, "he who knows how to write," looks down on them with disdain, in consequence of which they are never to be met with in writing. The book-songs are so called because the bard generally reads them out of a book instead of repeating them by heart. The same rivalry between booklearning and the mind of the people is observable amongst the Siberian Tartars, only there the latter is under the influence of the priesthood and the fanaticism it encourages. The fairy tales and ancestral legends preserved by tradition have now no place of refuge but the hearts of the aged, to whom they recall the memory of an age that has passed away, for the present generation only knows Moslem poems, of which Radloff also gives a few samples.

After acquainting ourselves with the territory occupied by the Turkish tribes of South Siberia, as well as with their general features, we may begin to consider their intellectual productions more nearly. The most characteristic of these are undoubtedly the epic poems, of which the leading features are described in Schieffner's introduction. I have already pointed out elsewhere (*Gött. gel. Anz.* 1866, pp. 1331, 1332) that these songs, in spite of much diversity, still have many elements in common with those of other nations, and the same is true of the tales, as appears from the following example:—"A poor youth, Salamja by name, possessed a fox which he had reared. The fox repaired to a neighbouring khan, and, seeking his daughter in marriage for Salamja, received a promise of consent. Thereupon he borrowed, still in his master's name, the khan's silver-weights and returned them with some pieces of silver which he had stolen sticking in a crack, and he did the same with the gold-weights, so that the khan thought his future son-in-law was very rich, and began to make preparations for the wedding. Then the fox made a ship and luggage and soldiers out of straw, and put the soldiers and the bridegroom on the ship, and made it sail toward the city of the khan; he himself hastened forward by land and persuaded the khan to come out and meet Salamja. As soon as he was in sight, the fox, who was a magician, raised a great storm and wind,

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so that the ship sank with all hands, and only Salamja was washed ashore naked; so the khan gave him rich clothing in which he was married. After this Salamja set out to return to his own country, with many slaves and great riches as his wife's dowry; but the fox ran on before, and by false pretences persuaded the keepers of great herds of horses, cows, and sheep, which he met on the three following days, to tell Salamja's slaves that they belonged to him instead of to their real owner, Jilbegän with seven heads. When the fox came to the house of Jilbegän himself, he persuaded him in the same way to hide himself from Salamja's army in a well, and to let the fox cover up the mouth of the well with a heavy stone, so that when Salamja arrived he took undisturbed possession of Jilbegän's wide lands and inexhaustible treasures. But the fox went on his way." In this tale, which, like many others in the collection, is told in different ways, the reader will immediately recognise "Puss in Boots," though the cat is turned into a fox, and the boots have disappeared, a variation common to most other Western versions of the tale. This Turco-Tartar version is the only one that has yet been met with in the East, and it is remarkable that in the form of the story given in the fourth volume (not in that given in the first volume) the fox appears as the magician who can summon up winds and storms; so far as I am aware, this power is nowhere else ascribed to the fox, an animal with whom few mythological ideas are associated. The cat, on the other hand, not infrequently appears as a sorceress who conjures up storms of wind and rain (Grimm, *Deutsche Myth.* pp. 151, 282; Kelly, *Indo-European Tradition and Folk-lore*, pp. 236, 237), and one is tempted to conjecture that the latter animal originally filled the place of hero in this cycle of tales. But it would lead us too far to examine thoroughly this question, so I will content myself with pointing out the relationship of some of the other tales in the work before us to those already known; one parallel, however, must suffice in each case, as an exhaustive notice would occupy too much space. Thus "Tschälmäsch" (i. 302, No. 12) is the equivalent of "The Three Widows" in Campbell's *Popular Tales of the Western Highlands*; "Der Arme" (i. 313, No. 13) = Grimm, *Kinder-märchen*, No. 19, "Der Fischer un sine Fru;" "Kosy Korpösch" (iii. 281, strophes 147-198) = Grimm, No. 136, "Der wilde Mann" (*Eisenhans*), to which cycle the legend of Robert le Diable also belongs, as I have shown in the *Gött. gel. Anz.* 1869, pp. 976-979; "Hämra" (iii. 518) = Grimm, No. 57, "Der goldene Vogel;" "Kosum Khan" (iv. 11), "Khüzüm Khan" (*ib.* p. 139), and "Jermak" (*ib.* p. 179), three versions of the legend of Dido's Cow-hide; "Der Dieb" (iv. 193) = the legend of King Rhampsinitus' Treasury; "Der Hahn" (iv. 260) = La Fontaine's "La Laitière et le Pot au lait;" "Die Waise" (iv. 373) = Grimm, No. 126, "Ferenand geträ un Ferenand ungeträ;" "Die Almosenspenderin" (iv. 408) = Grimm, No. 31, "Das Mädchen ohne Hände." These are a few examples of those Turco-Tartar tales which are also known in Europe, though many of them are met with too in other parts of Asia; some, again, are only to be found in Oriental works, such as the Arabian Nights, Persian Tales, the Kalmuck Ssidi-kür, the Mongol Ardschi Bordschi, &c. Besides whole narratives, there are a great number of isolated traits which we have met with elsewhere, such as the scattering gold in the way of the army, to delay the pursuing enemy (i. 210—Schydar Ubang: see *Academy*, vol. iii. p. 23); the smelling blood (i. 307): "Uf, Uf, I smell the smell of men!" = "Fee, fo, fum, I smell the blood of an English man." "Die Verwandlung eines Mädchens in ein Hermelin" (ii. 201, vv. 842-845) belongs, like the preceding trait, to a widely disseminated cycle. The ermine (Lat. *Mus Ponti*, or *Mus*

Ponticus) is very like the weasel, for which reason the latter is called by the modern Greeks ποντικονφίτζα, or sometimes merely νυφίτζα. But the latter name is a diminutive of νύφη (*νύμφη*), and means accordingly young woman, maid, or little bride, and corresponds to the Italian *donnola* (dimin. of *donna*), to the German *Jungferchen*, *Fräulein*, the Bavarian *Müemelein* (little cousin), *Schönhierle* (pretty little creature), the Spanish *comadreja* (godmother), the Danish *brud* (a bride) or *den kjønne* (the fine one), and the Basque *andereigerra*, from *andrea* (woman or lass). The connection of all these epithets with a mythical origin is rendered increasingly probable by the old English and Cornish name for the weasel, "fairy," on which I have commented elsewhere. Aelian is certainly alluding to similar myths in his *Hist. Anim.* 12, 5 and 15, 11; in the latter passage particularly he says that the weasel was once a woman, skilled in magic and very licentious, whom Hecate had turned into that animal as a punishment. "Die versteckte Seele" (iv. 88) may be compared with "The Young King of Esaïdh Ruadh" in Campbell's *Popular Tales*, and there are many other analogous traits which I omit.

But apart from the history of popular fiction, Radloff's work is important in other respects, as, for instance, with reference to ethnography and the history of civilisation. Thus in an Altaian tale (i. 69) a raven and a swan are sent to lead the way across the sea, which reminds us how before the use of the magnet the ancient Norsemen used to let a raven fly from their ships, to ascertain whether they were near land, by seeing whether the bird returned to the ship or not; and again of a passage in Pliny (*H. N.* 6, 24), according to which the inhabitants of Taprobane (Ceylon) used, in their voyages to India, to steer their course, not by the stars, but by the flight of the birds they took on board and then released. From another passage (iii. 13) we learn that usage forbids women under any circumstances to pass by the elder relations of their husbands, or in youth to uncover their faces before them, and they are not allowed to pronounce the name of their elder relations, and if the name chances to be the same as that of any other common object, they are not allowed to mention the latter, but have to describe it by a circumlocution; and in the same way, a newly married woman is not allowed to come towards her stepfather, nor to address him first. We see here traces of a widely spread custom, which reappears amongst the natives of other continents, to be observed by certain relations by marriage (Tylor's *Early History of Mankind*, 2nd ed. pp. 290-293). The notion which leads the Kirghiz to personify every illness, so that fever is "an old spirit" (iii. 64), which nevertheless appears in the shape of a young girl, is met with in various forms elsewhere (cf. Grimm, *Myth.* pp. 1106, 1107). On the mode of divination from the shoulder blades, especially of sheep, practised by the Kirghiz and Kalmucks, as well as elsewhere, see Tylor's *Primitive Culture*, i. 112. Grimm's *D. M.*, p. 1233, also mentions the Circassians. The Flemish settlers in Wales used the same kind of divination, which they must have brought with them from their former homes (Girald. Cambren. *Itin. Cambriae*, i. 11). It seems to have been equally well known to the Afghans, for in one of their poets we read: "When, with the mind, I examined the shoulder-bone of prediction, I saw that," &c. (*Selections of the Poetry of the Afghans, &c.*, by Captain H. G. Raverty; London, 1862). In a tale of the Schors (Radloff, i. 390) it is related that Ai Mögö drew the top of nine larch-trees together, and laid the bones of Kysyl-Tas there. Just so in Schießner's *Helden sagen der Minussinschen Tataren*, p. 207: "Katai Chan, being near to death, said to his son: 'When I die, bury me not in the lap of earth, but bind the tops of

nine larch-trees together and place the coffin thereupon.' An exactly similar usage prevails on Vancouver Island : " Among some tribes it is the practice to place their dead in boxes upon the branches of trees" (*Travels in British Columbia, &c.*, by Captain C. E. Barrett-Lennard ; London, 1862). For the rest I have no doubt that the custom, which may very probably exist elsewhere as well, is connected with the belief, common to almost all races, that the souls of the departed like to revisit their earthly dwelling-places, so that it was natural that their bodies should be laid there after death ; and these dwelling-places, we know, in the earliest times were often situated on or in trees and bushes, such as those which still form the habitations of some more or less uncivilised tribes. For a detailed discussion of this subject and the kindred superstitions relating to the residence of spirits or ghostly beings in trees and thickets, the reader can refer to my papers in the *Gött. gel. Anz.* (1864, pp. 1424, sqq.), and in the *Heidelb. Jahrbücher* (1866, pp. 867, sqq. ; 1868, pp. 93, sqq.). Amongst the Tümenian Tartars (Radloff, iv. 441) a very singular custom formerly prevailed, and perhaps still continues, as we gather from the following historical narrative : " Once on a time a Lama was sick, and when it became evident that he was going to die, they gathered the people together and came back to the Lama ; but on coming in, they found the Lama supported on one knee and one foot, though he was already dead. ' Who will throw him down ? ' they asked. Then said some : ' One who was born in the year of the monkey* must throw him down.' Now it was found that the son of the Lama was born in the year of the monkey. So they said to him, ' Throw down thy father thyself ; ' and he did so with a stick. Then they brought the corpse into the open air, and they took off his coat and rubbed the body with mutton fat. When the fat had got cold upon it, they lighted a fire upon the body and burnt it. Then they gathered the bones together and pounded them fine like meal, out of which they kneaded dough, and of this they made images of all the beasts in the world. They fastened these images in a row upon a board, and brought the board to running water and cast it in. ' This is a great saint,' said they, and accompanied him with their thumbs thrust in their ears. Then they returned home." Besides all the rest, it is noticeable that the dead Lama was found half standing, and the question arises whether that attitude was intentionally assumed at the moment of death, and why. On this point, perhaps, a Mahometan legend of King Solomon is not irrelevant, which tells how, when his time was come to die, the angel of death led him into a room of which the walls were made of crystal. Then he prayed, and supporting himself upon a staff, he begged the angel of death to receive his soul while he remained erect. It was done accordingly, and so his death was concealed from the Djinn for a whole year, until the temple was finished ; and they only discovered it when the worm-eaten staff gave way under him (Weil, *Biblische Legenden der Muselmänner*, p. 279). In an old French chronicle a somewhat similar story is told of Virgil (the sorcerer Virgilius of the middle ages), who had so arranged that for many years after his death he was believed to be only sitting on his chair absorbed in study (*Ly Myreur des Histors. Chron. de Jean d'Outremeuse*, i. 277 ; Acad. royale de Belgique).

I have already mentioned that various historical songs are met with amongst the Turco-Tartars, some, for instance, upon Genghis Khan, Yermak Timofeyef, the first discoverer of Siberia, &c. There is also a very elaborate satire on the Kir-

ghiz, which contains many allusions to their manners, customs, and mode of life. As a matter of course, love-songs are forthcoming, of which the following stanzas may serve as a sample. Amongst the Kysyl Tartars the girl sings : " While I live in my mother's hand, I am ever thinking of marriage ; while I live in my father's hand, I think ever of going to the priest." The young man sings : " Wilt thou fly with me, O maiden ? see the horse is here fastened to the gate-post ; wilt thou fly with me ? see the horse is standing ready." In conclusion I will quote a few of the proverbs of the Altaians and Teleutians. " Let it be thine own house, however poor ; thine own groats, though the gruel be meagre" = " Home is home, be it ever so homely," " Follow the high-road, though it winds" = " Compendium, dispendium," or, as a Cornish tale puts it : " Take care how you leave an old way to choose a new one," " Not as reason thinks, but as God determines" = " Man proposes, God disposes ;" " If the father goes wrong, the son is good for nothing ; if the mother, the daughter" = " Like sire, like son." " In the heart of a woman there is a radiant mail-clad man ; in the heart of a man, a fiery steed ready saddled." " He who shoots much is no shot ; he who talks much is no orator ;" &c. &c. Riddles, and some of them very original and characteristic ones, are also given, but I need not dwell upon these, as what I have already said will be sufficient to show the importance and interest which the work possesses in so many respects. The preface to the fourth volume does not state whether the series of literary specimens is to be regarded as already completed ; in any case there is still to follow a dictionary and grammar of the different Turco-Tartar dialects, examples of which are offered by the four volumes of the original text that accompanies Radloff's translation, and gives his work a prominent linguistic value in addition to its other merits.

FELIX LIEBRECHT.

Gareth and Lynette, &c. By Alfred Tennyson, D.C.L., Poet Laureate. Strahan and Co.

THE present volume, in spite of its miscellaneous title, consists of two idylls only, *Gareth and Lynette*, and *The Last Tournament*, of which we spoke when it appeared in the *Contemporary Review*.* *Gareth and Lynette* has one peculiarity : it is the only poem of the series, except the *Passing of Arthur*, in which the story is told straightforwardly from beginning to end. Perhaps the subject is hardly fortunate ; the story is in itself rather thin and hackneyed ; it has no organic connection with the Arthurian cycle, into which it enters in various forms, and always in an advanced stage of decomposition. The female Cinderella is generally a victim ; but her male relations, though occasionally snubbed, more commonly disguise their accomplishments for no better reason than to make people stare when the time comes to display them, unless indeed we think, as is not unlikely, that those forms of the legend are the oldest in which the hero is really foolish or effeminate till opportunity makes a man of him. In two of the minor legends of *Lancelot*, he himself as the Knight of the Cart and the Ill-shapen Knight appears as the "ironical" hero ; Mallory gives us an unfinished repetition of Gareth and Lynette in *La Cotte Mal Taillee* and *La Damoselle Maledisant*, whom Lancelot christens *La Damoselle Bien Pensaunt*, because she alleges that she only insulted her champion in order to prevent his exposing himself to danger ; but this is plainly an afterthought, and she is really the sister of the ill-favoured dame whose taunts in *Wolfram von Eschenbach* are the principal element in the education of Parzival.

* The monkey-year is the ninth year in the 60-year cycle of the Mongolian reckoning of time.

* See *Academy*, vol. iii. p. 554.

The only changes Mr. Tennyson has made in the main framework of the story are that Millisent releases her son from his disguise as scullion in Arthur's kitchen at the end of one month, instead of holding him to his promise for the conventional twelvemonth and a day, and that Lynette betrays her feelings in songs (which the interpolated insults make more incongruous and unsatisfactory than the lyrics of any of the previous idylls), and, last and least, that Gareth marries Lynette instead of Lyonors. Nor is the obvious effort to make the humiliation of Gareth by Sir Kay and Lynette edifying particularly interesting or successful. The real charm of the poem lies partly in the unfailing richness and grace of the style (though there are unfinished phrases like these : "Kay Fell shoulder-slipt ;" "Through helping back the dislocated Kay ;" and "Slicing a life-bubbling way Through twenty folds of twisted dragon"), and chiefly in the romantic symbolism, the picturesque mysticism which the author has "added of his wit" to a somewhat threadbare and conventional legend. The old man who meets Gareth and his companions at the gate of Camelot may be somewhat commonplace in his moralising over Arthur's vows, but the description of the gate itself is what no other poet could have written, and even the morality is redeemed by the following lines, which are in Mr. Tennyson's deepest vein :—

"For, as ye heard a music, like
They are building still, seeing the city is built
To music, therefore never built at all,
And therefore built for ever."

Again the hermit's allegory of the Morning, Noon, and Evening of Life hunting the Soul of Man is not too ingenious to be frigid ; and if we suppose the different fortunes of the suitors of Lyonors, who masquerade in imitation of them to typify the fortunes of the enemies who multiply upon Arthur, the parallel is hardly thrilling, but the description of Death is undeniably impressive :—

"When the Prince
Three times had blown—after long hush—at last—
The huge pavilion slowly yielded up,
Thro' those black foldings, that which housed therein.
High on a night-black horse, in night-black arms
With white breast-bone, and barren ribs of Death,
And crown'd with fleshless laughter—some ten steps—
In the half light—tho' the dim dawn—advanced
The monster, and then paused, and spoke no word.
But Gareth spake and all indignantly,
'Fool, for thou hast, men say, the strength of ten,
Canst thou not trust the limbs thy God hath given,
But must, to make the terror of thee more,
Trick thyself out in ghastly imageryes
Of that which Life hath done with, and the clod,
Less dull than thou, wilt hide with mantling flowers
As if for pity ?' But he spake no word ;
Which set the horror higher : a maiden swooned ;
The Lady Lyonors wrung her hands and wept,
As doomed to be the bride of Night and Death ;
Sir Gareth's head prickled beneath his helm ;
And ev'n Sir Lancelot thro' his warm blood felt
Ice strike, and all that mark'd him were aghast."

And this solemnity gives additional value to the blithe *dénouement*, in which Death turns out to be an innocent boy, rather younger than Gareth, who accordingly proceeds with great dignity to patronise him.

Continuations are proverbially perilous, but the risk in Mr. Tennyson's case is only for his contemporaries. We read *Gareth and Lynette* after *Elaine* and *Guinevere*, and it is only natural that it should not produce the effect of a climax ; our descendants, who will read it between the *Coming of Arthur* and *Enid*, will have a better chance of doing justice to what, after all, is a beautiful and delightful poem.

G. A. SIMCOX.

NOTES ON LITERATURE AND ART.

In Westermann's *Illustrierte Monatshefte* for August there is an interesting account by von Maltzan of a "Six-fingered dynasty" which has reigned for about 150 years in South Arabia, partly by help of the unusual courage and energy displayed by the sultans and partly through the prestige which attaches through the East to persons gifted with supernumerary members, like the Philistine in 2 Sam. xi. 20. The Fodli dynasty are of Himyaritic race, black, ugly, and in the elder branch, where purity of blood is scrupulously insisted on, six-fingered and six-toed. The sixth finger is only rudimentary, a perfectly useless stump, but highly valued as a proof of breeding, and the peculiarity is common, though not universal, amongst the remoter princes of the blood.

The birthday of Muratori (21st October, 1672) has just been celebrated in his native place of Vignola. Dr. A. Dove (*Im Neuen Reich*, October 18) writes *à propos* on "Muratori's significance," hailing him as the precursor and almost the father of German historical research : the great collection of *Monumenta Germaniae* is only a repetition of his *Annals* under, of course, changed conditions and with a clearer critical standard in view. The *Gazzetta ufficiale* contains in several numbers a study, by Professor Contini, which enumerates his works at length, and gives some interesting biographical details. A tradition says that his father was too poor to allow him to learn Latin, so he used to listen at the keyhole while the schoolmaster was giving his lessons, till he was caught in the act and allowed free entrance. He used to work twelve hours a day till he was seventy-seven, and lost his sight three months before his death. His memory was of course stupendous ; but nothing can make the statement, that he composed the first nine volumes of his *Annali d'Italia* in ten months, anything but incomprehensible. He was a stern foe to mendicancy, which he is said to have banished from his parish, and he founded a charitable company bearing a very strong resemblance to the "Society for the Organization of Charitable Relief," now at work in London.

Mr. Frederick Harrison, in the *Fortnightly Review* (November), "On the Supposed Necessity of certain Metaphysical Problems," denies the existence of such problems, or at least that the same problems are always necessary. The four common problems, God, the Soul, Creation, and a Future State, do not trouble savages or the Chinese, and were not conceived by the ancient Greeks or the Hindoos in the same way as by moderns. He instances as a problem of as much interest the nature and existence of Protoplasm, and urges that no one now cares to discuss the freedom of the will or the origin of evil (cf. however Mr. Greg's *Enigmas of Life*). It might be thought that the problem of protoplasm owes its interest to the fact that it is one way of solving the problem of the soul or the nature of the vital principle.

In the *Theological Review* (October) Miss Cobbe has a paper in favour of the immortality of the soul of man.—An article in the *Quarterly Review*, attributed to the same writer, inclines to extend the same privilege to dogs.

"A Bad Five Minutes in the Alps" (*Fraser*, November) is a rather well-written description of the emotions of a nineteenth-century *Weltkind* in view of approaching death ; but it is rather too long, and passes into an account of the reflections common to the same character when *not* in danger of death, and these are naturally less interesting.

An association for the encouragement of Greek studies in France was founded some years ago by a pretty numerous group of men of learning, men of letters, and artists. The object of the society, which holds its meetings in the *École des Beaux-Arts*, is to support and, if possible, extend the share allotted in the ordinary liberal education (so called) to the study of Greek culture. Struck by the comparative want of interest in the *chef-d'œuvre* of Greek art, this society has resolved to add to the critical and philosophical dissertations which it now publishes in its transactions the reproduction of such consider-

able works of Greek art as have not yet been made public. These reproductions are printed separately in quarto, with accompanying explanatory text, and are published in numbers, under the title of *Monuments grecs*. This year's subject is a Greek vase, of singular size and beauty, recently acquired by the department for antiquities of the Louvre Museum. On the inside the design represents Theseus borne by Triton into the deep, and receiving, in the presence of Minerva, a crown from the hands of Amphitrite. The reverse represents four labours of the same hero. The style is still archaic, but large and full of charm. The vase is signed Euphronios. The reproduction has been drawn and engraved by M. Sulpis; the archaeological commentary is by M. de Witte.

A short time back a portrait of the Marchese di Mirabella, attributed to Van Dyck, was sent to the Pinakothek at Munich from Schleissheim. The attribution was much discussed at the time, but in spite of adverse criticism, Dr. Wilhelm Schmidt steadily maintained its correctness. He has lately contributed to the *Allgemeine Zeitung* a short notice of the painting in question, and of the grounds for believing it to be a genuine work by Van Dyck. Dr. Schmidt does not forget the portrait of the same nobleman, also attributed to the same painter, which is in the possession of the Earl of Warwick. The Munich picture is considerably the larger of the two, which looks in favour of its authenticity. Waagen noticed in the Warwick Castle example a "golden tone," from which he suspected it to have been painted by Van Dyck at Venice, under the influence of Titian. But this is not very striking; and except for the unusual care of finish, Lord Warwick's fine picture has no smack of the copy about it. Perhaps it is a repetition?

The casts from the antique in the Berlin Museum are arranged according to subject. This arrangement, which forms a special exception to the chronological method which is strictly followed in the other departments, has been attacked by Professor Conze in the last number of the *Preussische Jahrbücher*. Professor Conze's article has drawn forth a reply from Dr. Bötticher, who is the person responsible for this state of things. Professor Conze justly maintains that the whole question of scientific arrangement for the purposes of scientific study is here at stake. To which Bötticher has some difficulty in replying. The arguments by which he supports his position amount in the rough to this—the chronology of ancient sculpture is as yet very uncertain, and there are many points still in dispute amongst archaeologists themselves; therefore to attempt historical arrangement would be to keep the collection in a perpetual state of disturbance. This defence, which is manifestly a very weak one, has been efficiently criticized by Reinhard Ketulé in *Im Neuen Reich* (October). Archaeologists do not require a complete order carried out in every small detail, for that would be to demand the impossible. What they ask for is an arrangement which shall take account of the assured results of historical research. And as far as concerns the relative grouping of the principal epochs of ancient sculpture, a great deal more has been exactly ascertained than Dr. Bötticher (who touches here on a province not familiar to him) appears to be aware of.

The town of Brussels has acquired the fine collection of drawings sold this year at Ghent representing the details of the ceremony of the inauguration of the Emperor Charles VI. as Duke of Brabant in 1715. The drawings are executed by the court architect Baurscheidt. The town has also purchased the original design for the pulpit of the church of SS. Michel and Gudule; a photographic reproduction of the Grimani breviary; and an example of the magnificent medal struck in 1708, to commemorate the raising of the siege of Brussels by the French-Spanish army.

The approaching publication of a work by M. Émile Ollivier has been announced, entitled, *Une Visite à la Chapelle des Médicis: dialogue sur Michel-Ange et Raphaël*.

The well-known collection of works of art possessed by M. Mancel, formerly a bookseller and publisher at Caen, has been by him bequeathed to the town of Caen, subject to the

fulfilment of certain rather onerous conditions. If Caen declines the bequest, it is to be offered, still on the same terms, to Rouen; should both Rouen and Caen refuse, the collection falls to the State. The books to be deposited in the National Library; the engravings in the print-room of the same establishment; the paintings and drawings in the galleries of the Louvre; the other works of art in the Cluny Museum. M. Mancel was the purchaser of the whole collection of engravings, amounting to 50,000 in number, left by Cardinal Fesch.

Dr. Messmer contributes to the *Allgemeine Zeitung* for October 28 a useful little review of the literature of Christian art. He begins with a string of brief notices of recent works—Lübke's *Deutsche Renaissance*; Dr. Franz Kraus' *Die christliche Kunst in ihren frühesten Anfängen*; Desbassyns de Richemont's *Études sur les Catacombes romaines*; Neumann's *Drei Dombaumeister Roritzer*; Bucher's *Die Kunst im Handwerk*; *Quellschriften für Kunstgeschichte und Kunsttechnik*; Hotho's *Geschichte der christlichen Malerei bis zum Ende des 15. Jahrhunderts*; &c. To these he appends a short review of the principal books published in Italy, France, Germany, and England, since Vasari in 1550 inaugurated this branch of research. As might be anticipated, the German list is by far the most complete, the English list is very poor, and there are considerable omissions in the French.

A "Black and White" exhibition is to be held at New York the beginning of next year, and contributions are invited from the artists of all countries. The details of the conditions and arrangement have not as yet been made public.

Many new particulars of the life of Overbeck are contained in *Brevi Notizie intorno alla Vita e alle Opere di Giov. Federico Overbeck* (Naples). The pamphlet in question is the work of Giulio Borgia Mandolini, who has taken much pains to gather together information from those best qualified to give it. Overbeck's last work, the designs for the "Seven Sacraments," still remains unsold in Rome. A correspondent of the *Allgemeine Zeitung* pronounces them to be, in his opinion, the most beautiful and perfect of all Overbeck's works, and expresses the hope that Germany will not allow them to be carried off by any other country. The same correspondent, who writes from Rome, announces that the famous Villa Albani, now called Torlonia, is to be sold, together with all the works of art which it contains, amongst which an important painting of Perugino's, and Giulio Romano's designs for the "Marriage of Cupid and Psyche," completely carried out in oil, are mentioned.

The *Gazette des Beaux-Arts* for September 1 commences with an interesting contribution to Raphael literature from the pen of the Marquis Giuseppe Campori. The archives of Mantua have furnished many important documents to the historians of Raphael, but their treasures are not yet exhausted. Two letters of Elizabeth Gonzaga, wife of the Duke of Urbino, now published by the marquis, contain curious indications of two works by the hand of Giovanni Santi, which are now supposed to have perished. A letter of Stazio Cadio, the agent at Rome of the Marquis of Mantua, has also been brought to light, which furnishes proof of the existence of a portrait by Raphael of Frederick, the young son of the marquis, detained in Rome by Julius II. as a hostage for his father's loyalty. The existence of such a work had been suspected by Passavant and others, but never proved. The Marquis Campori gives us the agent's letter recounting how Frederick was dressed for the sitting, "armé avec un sayon de V. Exc." &c. The article contains a great variety of similar new details, some of which may prove to be of consequence to future investigators.—M. Lechevallier-Chevignard notices "Quelques Portraits de Henri IV"; and at p. 371, l. 22, we find a misprint: "Brunel le peintre de la petite galerie," &c., should be "Bunel." The person in question is evidently Bunel, a Huguenot artist, who, employed at the Escorial by Philip II., was called to Paris by Henri IV. to work under Dubreuil at the interior decoration of the Louvre.—M. Havard has a third article on the Amsterdam exhibition.—M. Lecoy de la Marche concludes his publication of the letters of the directors of the Academy of France at Rome.—M. Ménard

contributes the remaining portion of his valuable and suggestive paper on the Symbolism of Desire.—M. Champfleury writes a notice of the Ceramic of the north of France, *à propos* of the Retrospective Exhibition at Valenciennes.—The illustrations to M. Ménard's paper are very choice, and the number contains an excellent etching by Veyrassat from his painting of "A Village Smithy."

The *Allgemeine Zeitung* for October 8 contains a report as to the present state of the Loggia of the Vatican, which is very satisfactory, especially as regards the restorations which were completed in 1870 by Mantovani and Consoni. The writer states that Signor Consoni, to whom the reparation of the subject frescoes was entrusted, has in no case painted over even a trace of original work; he has confined himself wholly to filling in destroyed places. In another letter the same correspondent speaks enthusiastically of the success of Signor Botti's (of Pisa) method of restoring faded frescoes. The undertaking of transferring the frescoes of the Campo Santo from the wall to canvas has been committed to his care, and his first successful attempts have been made on some by Benozzo Gozzoli. He refixes the fresco in its place by means of a liquid—the composition of which he keeps secret, as he does also the ingredients of the wash by which he refreshes the colours. The method would seem to resemble that of Abbate Malvezzi (see *Academy*, vol. ii. p. 558), which has been recognised by the Academy of Milan and employed on the frescoes of Gaudenzio Ferrari at Varallo with great success. Signor Botti has, it is said, also restored, satisfactorily, "The Last Judgment," by Giotto, and several of his minor works in the Scrovegni chapel at Padua. Regarding this last-mentioned chapel, we learn from another source (*Kölnische Zeitung*) that the long pending litigation concerning it between the government and Count Gradenigo has at last terminated in favour of the latter. The government had claimed it as church property under the law of confiscation.

A correspondent writes to us to mention, in connection with Mr. Colvin's article on the *Hypnerotomachia* (October 15), the fact that, in addition to the notices there cited, the book is mentioned slightly by D'Israeli in his chapter on "Literary Follies" in the *Curiosities of Literature*. He sees nothing in it but an inflated love-tale and "amatorial meditations."

We understand that Dr. C. M. Ingleby has at press a work entitled *Shakespeare's Prayse Sung by the Poets of a Centurie*, being a complete catena of song allusions to our great bard.

New Publications.

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Theology.

History of Jesus. [Geschichte Jesu von Nazara in ihrer Verkettung mit dem Gesamtleben seines Volkes, frei untersucht und ausführlich erzählt von Dr. Theodor Keim. Vol. II. Part II. : Das galiläische Lehrjahr. 1871. Vol. III. : Parts I. and II. : Das jerusalemsche Todesostern. 1871 and 1872.] Zürich : Orell, Füssli, and Co.

[THIRD NOTICE.]

THE completion of a work of such magnitude and importance as Dr. Keim's is a matter for most sincere congratulation. The courage to plan and undertake such a work is not often found; and when it is, the author will feel it as part at least of his reward that he should have been permitted to bring it to so happy a conclusion. Let critics differ as they may upon the value either of particular conclusions or of the total result of Dr. Keim's work, there can be no doubt that he has added a new classic to the library of theology.

There are many who would say that the task which Dr. Keim has set for himself was condemned to failure from the outset. They would content themselves with repeating a sentence quoted by Mr. M. Arnold *à propos* of recent attempts to recast the Gospel history generally: "Quiconque s'imagine la pouvoir mieux écrire ne l'entend pas." But Dr. Keim has virtually escaped the danger of such an attempt. When we say that his book amounts (at a rough guess) to about fifteen times the bulk of the Gospels themselves, we think we shall have said enough to show that it is not intended to enter into competition with them as a biography. It is rather an introduction, on the largest and most complete scale, to the study of the Gospels, or an encyclopaedia, biographically arranged, of the Gospel history.

Regarding it in this light, and looking back over the whole work as now complete, we may say that it contains: (i.) a criticism of the documents; (ii.) a criticism of the history; (iii.) a construction of dogma or philosophy founded upon these.

(i.) It is chiefly into the second and third of these parts that Dr. Keim has thrown his strength. And though the ability which characterizes the whole work comes out also in the preliminary treatment of the documents, still we think that this is the part in which Dr. Keim will be thought to have been comparatively least successful. His scepticism as to the result of previous enquiries perhaps may be justified; but the documentary criticism of the Gospels is too large a subject, and needs too special and detailed investigation of its own, to be incorporated merely as a branch in a book of historical criticism. We have said enough, perhaps, upon this part of the work already (*Academy*, vol. ii. p. 352.)

(ii.) But much of the peculiar thoroughness of Dr. Keim's treatment consists in this, that he does not let himself be carried away by any single hypothesis. He regards each single question as it arises from every possible point of view; and if we think there is traceable a certain prejudice arising from an undue preference for the first Gospel, and an undue suspicion of the fourth, still this will be found to detract less from the value of the enquiry than might be supposed. The statements of the fourth Gospel are discussed as ably and as fully as those of the Synoptists; and even where we feel disposed to differ from Dr. Keim, it is impossible to deny that he has fairly argued his case. Indeed, it is but justice to say that from first to last nothing of importance has been omitted.

Dr. Keim pursues, in regard to miracles, the principles which had been laid down in the earlier part of his work (see *Academy*, vol. ii. p. 353). The earlier storm at sea seems to him to contain a kernel of historical fact, with

colours added from Psalms cvi. and cvii. and the passage of the Red Sea. The second storm, with the walking upon the water, is more decidedly unhistorical, though it has perhaps grown out of some actual saying, and typifies the helplessness and deliverance of the Church. The record of the miracle which precedes this last (the feeding of the 5000) has its ground in a distorted version of the precept, "Give to him that asketh of thee." The multitude is fed with spiritual food, and in their enthusiasm the pilgrims on their way to the Passover divide their own scanty provision among their hungry neighbours. There is also, Dr. Keim thinks, an admixture of Old Testament elements derived from the feeding of Elijah (2 Kings iv. 42) and that of the Israelites in the wilderness (Ex. xvi. 1, ff.). The raising of the widow's son at Nain is a legendary construction on the model of Elijah's miracle upon the son of the widow of Sarepta. The miracle at Bethany is explained partly out of the exigencies of the Johannean narrative, partly as an ideal or allegorical representation of the work to which it forms the concluding scene.

It will not be expected that we should enter into the discussion of these theories. This remark, however, we must make, that in spite of the care and elaboration which are bestowed upon them they rest in secondary degree upon documentary criticism. Dr. Keim does not seem to assign a constant value to his documents. Why, for instance, should the history of the issue of blood and of Jairus' daughter be accepted almost as they stand, while that of the feeding of the 5000 and of the storm at sea is resolved practically into a myth? Obviously the reason is *a priori*: because the one admits of being rationalised, and the other does not. Yet both are clearly from the same document—a document to which Dr. Keim himself allows a high value (vol. ii. pp. 490, 495). And the great difficulty, as it seems to us, in the way of any attempt at the wholesale elimination of the miraculous from the Gospels is, that a different and unequal measure has to be applied to portions of the record that possess the same documentary value. The record of the miracles derives a reflected authority from that of the discourses; and the originality and accuracy of the discourses are vouched for, not only by their form, but also by a singular convergence and unity of testimony running through the whole of the documents and traditions embodied in our present Gospels. It will be noticed that one at least of the instances which we took as crucial in our earlier article (the Syro-Phoenician woman; see *Academy*, vol. ii. p. 353) is treated by Dr. Keim with singularly disproportionate brevity; as a miracle, indeed, it is hardly treated at all. Dr. Keim himself takes, as a crucial instance, the healing of the Gadarene demoniacs. And we may remark by the way that the passage in which this is done (vol. ii. p. 464) would have lost nothing in force if it had been expressed with a little more delicacy. It is one of the blots upon this noble work that it errs too often on the side of a coarse and ungainly rhetoric, which is apt to repel the reader from doing full justice to its real ability, and which is particularly unfortunate in dealing with such a subject.

Two characteristic instances of Dr. Keim's mode of treatment occur in the later portion of the work. As to the day and date of the Crucifixion, Dr. Keim, as we may suppose, naturally follows the Synoptists. He fixes upon Nisan 15th (= with a little straining of the astronomical premises April 15th), in the year 36. This is not however done by ignoring the difficulties which stand in the way. Dr. Keim treats very fairly and with great archaeological knowledge the argument (which is now, however, seldom pressed) from the improbability of a criminal process and execution taking place on the "great day of the feast." He thinks that there

was a kind of "stormy zealot rising" in which the forms of law were set at nought, and that the Crucifixion itself had in the eyes of its authors a certain expiatory religious character. He admits the attractiveness and seeming advantages of the Johannean narrative, but he refuses to quit the ground which seems to be established by the coincidence of the forms of the Last Supper with those of the Paschal Meal. Perhaps he is right in so doing, but this does not remove, it only suppresses, the strong case which had just been admitted in favour of St. John; and the question may fairly be raised whether our ignorance does not leave room for a reconciliation of both narratives which should not be inconsistent with the substantial authenticity of each of them separately. With regard to the date 35 A.D., Dr. Keim reiterates the arguments of his introductory volume, but we do not think adds very much to their strength. He rests his case mainly on the necessity for the "closest possible juxtaposition of the death of John the Baptist and the defeat of Herod by Aretas" (vol. iii. p. 498, n. 4). But the assumption, that in order to be regarded as a "judgment" this disaster must necessarily have happened immediately after the crime, has no great force in itself, and appears to be contradicted by Old Testament examples: e.g. 1 Kings xxi. 19, xxii. 38, compared with xxii. 1 (the death of Ahab), 2 Kings ix. 36 (that of Jezebel), 2 Sam. xvi. 21 (the punishment of David). We have called attention to the arguments which seem to make for a different date. It is to us incredible that John ii. 20 should be merely a calculation based upon Luke iii. 1 (vol. iii. p. 497, n. 2).

The questions arising out of the narratives of the Resurrection are treated by Dr. Keim at length. He tries—and succeeds to an extent which speaks well for his honesty of purpose—to hold the balance between the traditional or literal theory and that which resolves the several appearances into "visions." The old Rationalistic alternative of "simulated death" is mentioned only to be dismissed. Taking his stand not so much upon the four Gospels as upon 1 Cor. x., Dr. Keim (like Baur) considers it proved that the Resurrection, if not a fact, was at least believed to be one by the disciples. But the hypothesis of "visions" he cannot accept without reserve. He points to the difference between the earlier appearances and the later, such as those to St. Paul. In the former there is a strange simplicity and seriousness, a certain severity of character, which seem to mark them off from the ordinary products of religious excitement. The difficulty in regard to them, Dr. Keim thinks, is less that they should begin than that they should cease as and when they did. The visions of Montanism lasted over a period of fifty years, and ceased gradually, not abruptly like those in the Gospels. But the most important point is that the vision-hypothesis seems inadequate to account for the great mental and moral revolution wrought in the disciples. It moves in a vicious circle. The revulsion of feeling might perhaps account for the visions; but then how are we to account for the revulsion of feeling? If we are to follow the documents—and if we are not to follow them, how did they come to contain anything so paradoxical?—the disciples were not only not prepared for the Resurrection, but were surprised by it and incredulous of it. Dr. Keim accordingly leaves a certain margin beyond the vision-hypothesis, to be filled perhaps by direct divine agency or by real objective spiritual impressions materialised in the reports into the grosser shape of visions. The vision-hypothesis would make the whole subjective. Dr. Keim would go so far in the direction of the traditional view as to say that there was an objective supernatural cause at work as well; but he regards this cause as incorporeal, and working only in the domain of spirit.

Here the orthodox and the critical theory almost join hands; because it is inherent in the circumstances of the case that the narrative should be coloured by subjective beliefs and impressions, and on the other hand, when once a supernatural element is admitted, the extent of it will remain an unknown quantity.

(iii.) The last forty-six pages of the book are taken up with a dogmatic estimate of Christianity and its Author. Dr. Keim accepts fully the view of those who from Goethe and Hegel to Strauss have seen in Christianity the "absolute" or perfect religion. He speaks eloquently of the perfect balance which it maintains "between philosophy and popularity, between religion and morality, between meek submissiveness and the pride of freedom, between the ideal and the real, between this world and the next, between the inward and the outward (*Innerlichkeit und Gestaltungstrieb*—an untranslatable but expressive phrase), between 'modest stillness' and heroic courage, nay, between the tenderest conservatism and the boldest plans of world-wide reform."

And yet Dr. Keim regards the Personality from which this religion took its rise as strictly human. His premises compel him to do so. And thus he is led to reject, not only the greater half of the Pauline and Johannean theology, but also to cut a line through the Synoptic Gospels themselves, which we venture to say would not be given by an investigation that was purely historical. In the last resort the principles to which Dr. Keim appeals are *a priori*. And this is the one part of his method to which we feel compelled to take exception. If the supernatural is excluded on *a priori* grounds, i.e. by philosophy, we may expect that it will also be excluded on *a posteriori* grounds, i.e. by documentary and critical investigation. But it is unfair to beg the question and make use of the assumption to determine the direction that such documentary and critical investigation shall take. The two methods should be kept distinct; and we should be quite sure of the result obtained by one or other of them before we allow it to dictate laws out of its proper sphere. Such an abstraction of mind however is difficult—perhaps unattainable—and in default of it we must needs welcome an *ex parte* statement so able, so honest, and so thorough as this of Dr. Keim's, and trust to the collision of opposite opinions to get at the truth as a sort of resultant between them.

We are very glad to see that the *Geschichte Jesu von Nazara* is down for translation in the new series announced by Messrs. Williams and Norgate. We would venture to suggest to the translator that the style will bear to be toned down a degree or two in English. If it has not the wonderful evanescent grace of M. Renan, or the polished incisiveness and dexterity of Sir R. Hanson, it is still bold, vigorous, picturesque, clear, and very varied in expression. The translator has a difficult and laborious task before him, and we heartily wish him success.

W. SANDAY.

The Desert of the Exodus : Journeys on Foot in the Wilderness of the Forty Years' Wanderings, undertaken in connection with the Ordnance Survey of Sinai and the Palestine Exploration Fund. By E. H. Palmer, M.A., Fellow of St. John's College, Cambridge. With maps and numerous illustrations, &c. Two parts. Cambridge and London : 1871.

MR. PALMER gives us here a description of two expeditions, which occupied the winters of 1868-69 and 1869-70. Both were "journeys on foot," and accompanied with the privations and perils incident to travel in the desert, and which only a thirst for knowledge could render tolerable. Their object, in short, was to ascertain whether the Bible account of the route of the Israelites was in harmony with

geographical facts and the nomenclature still in use among the Arabs. Mr. Palmer's special qualifications were familiarity with the spoken Arabic, and a singularly circumspect method of eliciting correct information from the natives.

The most important results are that the route of the Israelites must have lain through Wady Feirán to Sinai; that the scene of the legislation is not Mount Serbal (this is quite certain from the description of its site and environs), but the more elevated ridge whose southern part is called Jebel Músa; further, that the important station Haṣerōth can still be recognised in the present 'Ain Hudherah, in the Sinai mountains; and, lastly, the site of the much tried Kadesh is pointed out with absolute certainty in 'Ain Gadish (so spoken and written, instead of Qadish or Kadish).

The difficult station Rephidim, the last before the wilderness of Sinai, is placed by Mr. Palmer, with Lepsius, in Wady Feirán. This view must be rejected, in spite of the Arabic tradition brought to light in the present work. For according to Ex. xvii. 6, the water called for by the people in Rephidim was smitten by Moses from the rock "there in Horeb." But anyone who, like Mr. Palmer, rejects Lepsius' view, that Horeb-Sinai is in Serbal near Wady Feirán, cannot, without unduly extending the name of Horeb, transfer the position of Rephidim to that region. Mr. Palmer indicates as the traditional spot the rock *Hesy el Khattátin*, which he neither translates nor writes in Arabic, so that only the first word is recognisable. According to Freytag's lexicon, *hesy* is "puteus in arena effossus, cuius fundus haud remotus est"; according to that of Lane, "water which the earth imbibes, where sand is above it," not a very suitable epithet for a rock-spring, much less for the rock itself. Mr. Palmer's answer to the other objection, that from Rephidim to the wilderness of Sinai is only one day's journey according to the Bible, whereas the real distance is much greater, is that the night may be supposed to have been added to the day's journey, according to the modern practice, and that Moses, when arrived on the pass between both valleys, may have looked out for a place to encamp in. The Bible, however, simply says, "and they came to the desert of Sinai" (Ex. xix. 2). One of the principal reasons for throwing the plain of Rephidim so far back is that, in opposition to the traditional view, the scene of the legislation is placed on the front or northern point of the ridge of Horeb-Sinai, i.e. on the rock Sufsafeh. (This spot was also selected by Robinson and Lepsius on purely topographical grounds, because the plain er-Raha, the largest in the district, stretches immediately before it.) If, however, the general tradition be correct, the gathering-places of the people (i.e. a large part of the men, who alone belonged to the "congregation," and the elders of the people) must have been in the plain Seba'iyeh, which rises like an amphitheatre to the south of Jebel Músa.

Mr. Palmer's principal objection to this view is (part i. chap. vii.) that (Ex. xix. 23) bounds were ordered to be set round the mount, and he observes that it would be "simply impossible" to do this, "or even to come close up to the foot of Jebel Músa from Wady Seba'iyeh." But, in the first place, the phrase "round about" in Ex. xix. 12 is confined to the people; the mountain is simply to be bounded, verse 23 (see Hebrew), which would be effected by a partition on the side facing the people. And in the second, the implied possibility of touching the mount (Ex. xix. 12) corresponds to the observations of many other travellers, since Jebel Músa descends by a precipice about 2000 feet deep into the plain of Seba'iyeh, as Mr. Palmer in part i. chap. vi. himself admits. Besides, we are not to suppose an enclosure of stakes, for there is no wood, nor ever was there any, in the upper part of Sinai, but a line of stones between the

people and the mount, not insurmountable by nature, but by the threatened penalty of death for disobedience (Ex. xix. 12). Mr. Palmer, too, has recognised that the plain before the mount could only have embraced a part of the people with the elders, the remainder—old men, women, and children—encamping in the wadys of the neighbourhood. But in that case the number of those who found room is not important to the argument, and the claims of *Jebel Músa* are supported by its considerably greater height, and the universality of the Mohammedan as well as of the long Christian tradition. And it is not clear why this well-attested tradition of centuries should be sacrificed to the beautiful prospect from Sufsafeh and the belief of the Arabs, first discovered by Mr. Palmer, that the rock at Horeb out of which Moses brought water in Rephidim still exists in Wady Feirân. We ought also to consider the great difficulty of ascending the rock Sufsafeh, whereas there are several easier paths leading up *Jebel Músa*; especially as Moses was then at least eighty years old, and climbed the mount several times in the day.

The identification of *Háseroth*, the second station of the Israelites between Sinai and Haran, with 'Ain Hudherah, found by Mr. Palmer north-east of Sinai, is new and, I think, probable, as name and distance are about the same as in the book of Numbers. A new conjecture, which deserves further examination, is also proposed for the first station, *Kibroth hattaabah* ("graves of lust"). Mr. Palmer proposes to identify it with the old camp-ground now called *Erweiz el-Ebeirig* (the name is not explained, nor yet written in Arabic). This spot is said to have many graves, and to be a day's journey to the rear of 'Ain Hudherah; how far it is from Sinai is not stated—according to Num. x. 33 there were three days' journeys, which is perhaps too much. Of the following stations in Num. xxxiii., *Rissah* (verse 22), *Haradah* (verse 24), and *Tahath* (verse 26) are identified, the latter with a place *Ettehi*. The comparison of the Biblical *Haradah* (written with *kheth*) with *Jebel 'Aradeh* is improbable, partly because the first sound of this name is quite different (it is an 'Ain), partly because *Jebel 'Aradeh* is not far enough to the north of Hudherah to allow space for the six Biblical stations between those two places.

It is to be regretted that the travellers did not take the north-east direction towards *Eziongeber* (*Akabah*), on leaving *Háseroth* and the southern edge of the wilderness of *Paran*. For this was the route of the Israelites (Num. xiii. 1, xxxiii. 18, foll.), who are recorded to have made ten stations between *Haradah* and *Eziongeber*, many of which, as Mr. Palmer himself conjectures, might still be traced. Instead of this, the travellers turned straight northwards through the whole south part of *et-Tih*, passing by the fortress *Nakhl* (scarcely a reminiscence of the first part of *Nakhal-Misraim*, although the place lies by the Wady el-'Arish) in the direction of *Kadesh*.

It is one great merit of Mr. Palmer to have fixed the disputed position of *Kadesh* or *Kadesh Barnea*, the most southern frontier town of Palestine. It is the 'Ain Kadesh (Mr. Palmer gives as the present pronunciation 'Ain Gadish) mentioned, but not visited, by Rowlands, and situated a little to the south of the well-known *Guderat* (*Kudeirát*). The town of *Kadesh* must have been near a fountain, for the name in the Old Testament is interchanged with 'En-mishpat ("fountain of judgment"). Water enough is shown to exist at 'Ain Gadish, and a large plain bounded by fine mountains, viz. the desert of *Kadesh*, of which a beautiful view is given. The new name Gadish is phonetically identical with the old, since the Arabs of Egypt and, according to the present work, those of *Sinai* and *Arabia Petraea*, have replaced the hardest *k* of the Semites (Heb. *gof*) by a guttural *g*, so that

shaqq or *shakk* becomes *shagg* ("crevice," "cleft"); *kusír*, *gusír* ("castle"); *kataf*, *gataf* (a herb used for fodder), and *nakb*, *nagb* ("a mountain-pass").

Among the cities of the south, *Sephát* (the Zephath of the English Bible does not represent the Hebrew) was placed by Robinson at the pass of *Safáh*. If this is thought to lie too much to the east, it must be remembered that the name exactly agrees with that in the Bible, while the modern *Sebaita* (Rowland's *Sepáta*), adopted by Mr. Palmer, has much too distant a resemblance to it.* *Rehoboth* had been already identified with *Ruhaibe*. But the combination of *Shutneh* with *Sitnah* is new and satisfactory.

Mr. Palmer found the ruins of *Beer-sheba'* (Arabic *Bfr es-Séb'a*) in such a dilapidated state that it was impossible to form an idea even of the houses of the town, much less of its streets and walls. Like Robinson, he saw two wells, besides a third which had fallen into decay. Traces were also pointed out of four others, which are most likely productions of Arab fancy, for the existence of seven wells was long ago inferred from the second part of the Arabic form of the name (*sebt'a* = seven). The meaning "oath," however, (Gen. xxi. 31; LXX. φρέαρ ὀρκισμοῦ), though antiquated in the literary Hebrew, and of course unknown to the Arabs, is sufficiently established by the two Hebrew names *El-sheba'* and *Bath-sheba'* (not "daughter of seven," but "daughter of the oath"), and puts out of court the vague Arab tradition related by Mr. Palmer.

Eshkol, whence the Hebrew spies brought clusters of grapes, pomegranates, and figs to *Kadesh*, has generally been placed in the immediate neighbourhood of *Hebron*, on account of the vineyards which still flourish there. Mr. Palmer, however, places it much farther south, for the excellent reason that the fruits, particularly the figs, could not have been brought such a great distance fresh and without injury. The name indeed has not been discovered, but its meaning (*Nakhal Eshkol* = "wady of grape clusters") was of some use as an indication. Mr. Palmer places it not far to the north of *Kadesh* in Wady *Hanein*, which, after passing by *el-Birein*, meets Wady *Abyadh*, which further on unites with Wady el-'Arish. It is true that agriculture is at an end there, but there are still traces of its former existence, particularly of the cultivation of the vine. These consist of heaps or walls of stone extending in parallel rows, between which vines must have been once trained, for they bear the name *tuleidat et-enab* ("hills of grape-clusters") and at a short distance off, near the ruins of 'Abdeh, which will be mentioned directly, they are called *rujum et-kurúm* ("stone-heaps of the vineyards").

On their return journey from *Hebron*, after a short visit to *Jerusalem*, the travellers took a more easterly direction through the mountains of *Judah* by *Tell 'Arád* and *Elmíl* to the south. They traversed the mountainous district of *Rakhmeh*, in which Mr. Palmer not unreasonably suspects the יְרֵה הַמִּזְרָחָה (1 Sam. xxvii. 10), comparing the rejection of the *Ye-* in the modern *Ríha* for *Yeriho*; to which may be added *Zerín* (for *Zeril*) for the ancient *Yizreel*, and in Hebrew *Bil'am* and *Vible'am*, *Qabæel* and *Yeqabæel*, *Conyahu* and *Yechonyahu*. In the same connection, a thorough account is given of the various parts of the *Negeb* or "south country" which occur in the Old Testament.

The road to *Edom*, described in one of the last sections of the book, led through the mountainous country of the

* Cf. Mr. Palmer's letter in the *Athenaeum*, June 17, 1871, where he observes that, in his opinion, "the two words are as identical as they can well be; the Hebrew (Judges i. 17) being נֶבֶת, and the Arabic, according to the pronunciation of the Teyshah and 'Azásimeh Bedawín, being نَبَّة."—ED.

'Azázimeh Arabs, south-east of Beer-sheba' and north-east of Kadesh, a region which is now for the first time explored and fully described. The only material results, however, for the geography of the Holy Land are that an old road from Gaza to Petra and 'Akabah led through those mountains, and that the Roman station of Eboda (according to the *Tabula Peutingeriana*) has been shown with certainty in the ruins of the modern 'Abdeh, on a hill at the entrance of Wady Marrah, and another called Gypsaria in Wady Gamr, near the valley of el-'Arabah. Mr. Palmer rightly considers the oldest inhabitants of this region to be the Canaanitish 'Avím, who, according to Deut. ii. 23, with which Josh. xiii. 3 agrees, lived in *haṣerim*, i. e. "encampments," or "stone-huts." A number of stone-walls, which served for encampments, were found not only in these parts, but in the more southerly deserts inhabited by the Amalekites.

Passing over the description of Edom and Moab (including the pillar of salt supposed by the Arabs to be Lot's wife), I would particularise Mr. Palmer's account of the primitive stone-buildings found in the deserts of the south as far as Sinai. These consist of circular houses, with a vaulted roof, built of large rough stones; they served partly for dwellings, and partly no doubt for the graves of a pastoral race, which may of course have been Amalekitish, but may also have belonged to an earlier prehistoric population. Mr. Palmer compares similar buildings in other very different parts of the world.

In the description of Sinai, a full discussion is given of numerous remains of the historic period, e. g. of the Egyptian copper and turquoise mines, according to Egyptian inscriptions, the date of which can be determined. The so-called Sinaitic inscriptions in the Wady Mokattab and elsewhere, many of which Mr. Palmer copied, are ascribed to a heathen and commercial people. He attaches little importance to them, but it is to be hoped that he will publish his copies and interpretations, since those of Beer and Tuch may require to be supplemented and corrected. One would also have been glad to see the publication of the sepulchral inscriptions from Petra.

FR. DIETRICH.

Intelligence.

Dr. Ginsburg's report on his recent expedition to Moab, read before the geographical section of the British Association, has just reached us through the kindness of the author. It will be in the recollection of most readers that Dr. Ginsburg and his fellow-travellers "fell among thieves," who extorted from them a large part of the sum generously presented by the Association. A scarcely inferior misfortune was the sudden departure of Mr. Klein, the missionary, who was indispensable to the travellers from his knowledge of the language and ways of the Bedouins. But there are points of much interest to Biblical students, which must not be passed over, though we have not space to discuss the correctness of Dr. Ginsburg's conclusions.—In Num. xxi. 14, Vahab in Suphah (Saphia) and the brooks of Arnon are stated to be the southern and northern boundaries of Moab respectively.—From the name of the Wady Korcha (a short distance from the ruins of Um-el-Hashib) it is inferred that Korcha in the inscription of Mesha (lines 3 and 21) is the name of a town. Dr. Ginsburg is convinced that the place where the famous Moabite Stone was found is not the site of the ancient Dibon, but of Korcha. Mesha himself asserts that he erected the pillar at Korcha, and as it was too heavy to have been brought from another place without injury to the inscription, the spot where it was found must be the site of its original erection. There are several old ruins in the neighbourhood, one of which may be Dibon. The Dibán of the Arabs has been produced to order.—Dr. Ginsburg thinks there is no reason for identifying Kerak with Kir Moab or Kir Hareseth.—A place called Mochra, of which extensive ruins remain, is identical with the Mochrath of the inscription of Mesha (line 14).—Ar Moab, which was in the extreme north, is not the same as Rabba, which is almost in the centre of southern Moab.—In conclusion, Dr. Ginsburg observes that the most remarkable part of his experience is the ignorance of the Bedouins as to the nomenclature of the region between Dibán and the Jordan. The reason of this simply is that the law of supply and

demand, which has produced such great results in Palestine, has not yet been called into operation in Moab, at least not to the south of the Arnon. To explore the country properly, two or three scholars should go and live on the spot quietly for a few months, without putting any leading questions to the natives, and devote themselves to securing those lapidary records which alone will fix the names of the places wherein they have been buried.

M. d'Eichthal, well known as a quondam social reformer, and also by an unfinished critical work, *Les Évangiles*, has directed his attention to the traditions of the Exodus recorded in the Pentateuch and Manetho. The first instalment of his *Annales mosaïques* has just appeared; it is characterized by Ewald in the *Göttingische gelehrte Anzeigen* (October 23) as combining "German erudition with French elegance," and presenting "extremely sound views and tendencies." It is hard to reconcile the latter statement with the view of the author that the Israelites sojourned 950 years in Egypt.

Mr. Crowfoot has supplemented his useful labours on the Curetonian Syriac fragments by some observations on the relation which they bear to the textual criticism of the Gospels (sold by Williams and Norgate). He still refers for the most part to the Greek text of Scholz, but now and then compares that of Tischendorf. In the introduction he states his grounds for holding that the Curetonian recension was that used by the Syrian church in the third and probably in the second century, and that in the revised Peshito we have an Arianising revision of the date of the fourth century.

Professor Mössinger, of Salzburg, has brought out a brief "supplement" to Cureton's *Corpus Ignatianum* (by Wagner, Innsbruck). The contribution of most importance is the Syriac translation of the Martyrdom of St. Ignatius, and of the Epistle to the Romans, only fragments of which were printed by Cureton, from a copy of an old Nestorian MS.

Everyone will rejoice to learn that Dr. Tregelles' great edition of the Greek text of the New Testament is now complete. The Apocalypse has just been edited by Mr. B. W. Newton, formerly Fellow of Exeter College, Oxford, in conformity with Dr. Tregelles' manuscript. The Prolegomena are now in preparation.

Mr. Elzas, a Jewish scholar, has brought out a translation of the Book of Job, with critical and explanatory notes (to be had of Trübner and Co.). Excellent as it is in design, it is not to be compared in execution with the riper scholarship of Mr. Rodwell's version. The latter work, however, is unprovided with a commentary, while Mr. Elzas has managed to compress much useful information, and once and again some acute criticism, into his footnotes. Thus he surmises, independently of Dr. Grätz (*Monatsschrift*, June), that the 28th and part of the 27th chapter form the missing third reply of Zophar. There are also useful references to Jewish interpreters. It is a pity that these are interspersed with notices of second-rate modern critics; a pity too that Mr. Elzas has expressed such an uncritical opinion on the date and authorship of the poem, which he supposes to have been translated by Moses from the Arabic!

Contents of the Journals.

British Quarterly, October.—The Authorship of the Fourth Gospel. [Discusses most of the usual points both of external and internal evidence sensibly and with knowledge, but strangely omits to notice the peculiarities of the Johannean discourses. Renews, without any novelty of argument, the now generally abandoned attempt to show that the fourth Evangelist adopted the Synoptic date for the Crucifixion.]

Theological Review, October.—Prof. Russell Martineau takes occasion from Dr. Kalisch's recent work to review the argument for the late origin of the Levitical legislation. The approval extended to it by the able writer of Ewald's *History of Israel* is significant.

Revue Critique, September 7.—M. St. Guyard reviews a recent brochure in Russian by M. Harkawy on the primitive abode of the Semites, Aryans, and Hamites. [M. Harkawy, who writes from an "orthodox" point of view, identifies Shem, Ham, and Japheth with the mountain-ranges called Sim, Amanus, and Niphates respectively. He observes that Amanus occurs under the form Khamanu in the cuneiform inscriptions. Sim is attested by Moses of Khorene (i. 6, &c.); Niphates is the Armenian Nepat. Each of these branches of the Taurus forms the boundary of one of the groups of nations catalogued in Gen. x.]

Jahrbücher für deutsche Theologie, vol. xvii. No. 3.—Palmer: On the Explanation of Prophecy with reference to Events and Conditions of the Present.—Schmidt: The Resurrection of the Lord, and its Significance for His Person and His Work, with special reference to Keim's *Life of Jesus*.—Heman: Schleiermacher's Idea of the *summum bonum* and the Moral Problem.—Weizsäcker: The Mode of Papal Election from 1059 to 1130.—Notices: J. G. Müller's *The Semites*, &c.; rev. by Diestel. [Attempt to show that the Semites were originally Indo-Germans, whose language was greatly modified by contact with

Hamic races ; while customs and religious peculiarities were preserved in much greater purity.]—Kelle's translation of *Otfried*, and Grein's of the *Heliand*, and other documentary works of historical theology ; rev. by Wagenmann.—Jul. Müller's *Dissertations* ; rev. by Herrlinger ; &c.

Theologisches Literaturblatt (Roman Catholic), September 23.—Kraus : On the Mock-Crucifix of the Palatine, and a newly discovered Graffito ; rev. by Reiser. [Disposes effectually of the hypothesis that the ass on the graffito is a symbol of Typhon ; but proposes a still stranger one—that there were Christians in the fourth and fifth centuries who were given to *onolatry*. He refers, *inter alia*, to Cod. Justinian. i. tit. ix. 12.]—October 7.—Lipsius, Hilgenfeld, and others, on *Peter in Rome* ; rev. by Kraus. [Urges the argument from de Rossi's researches in the catacombs against Lipsius' view.]—October 21.—Ginzel's works on Church History ; by Schwab.—History of the Reformation in Holland ; Hugo Grotius' return to Catholicism ; &c.—November 4.—Works on the Pastoral Epistles ; rev. by Langen. [Dr. Langen thinks that the un-Pauline peculiarities indicate a divided editorship.]—Baumstark's *Christian Apologetics*, vol. i. ; by Dippel. [The book shows philosophical culture, and a just appreciation of the questions at issue. It treats of man (1) as an intellectual, (2) as an individual, (3) as a religious being.

New Publications.

CYRIL (of Alexandria). The Three Epistles. Revised Text, with English Translation, by P. E. Pusey, M.A. Oxford and London : Parker.

HAUSRATH, A. Der Apostel Paulus. 2. vermehrte Auflage. Heidelberg : Bassermann.

LECHLER, G. v. Johann Wyclif und die Urgeschichte der Reformation. Leipzig.

OVERBECK, F. Ueber den pseudojustin. Brief an Diognet. Programm. Basel.

TREGELLES, S. P. Greek New Testament. Part VI. : Revelation. [To Subscribers.]

TULLOCH, J. Rational Theology in England in the Seventeenth Century. 2 vols. Blackwood.

WEISS, B. Lehrbuch der biblischen Theologie des Neuen Testaments. 2. vollständig umgearbeitete Auflage. Berlin : Hertz.

Philosophy and Physical Science.

Aristotle. By George Grote. Edited by Alexander Bain, LL.D., and G. Croom Robertson, M.A. Two Volumes. Murray.

IMMEDIATELY after the publication of *Plato and the other Companions of Sokrates*, Mr. Grote turned with characteristic energy to the still more serious task of treating Aristotle in the same large and comprehensive manner. To the sorrow of all who value a high and noble nature, death overtook him in the autumn of last year, before half his work had been accomplished. These volumes, accordingly, are but a fragment ; and we miss much to which we had looked forward. We are left to imagine the firm hand with which he would have sketched the theories of the *Politics* and *Ethics* ; the interesting light in which he would have known how to exhibit the *Rhetoric* ; the excellent results that were to be expected, in another department of the Aristotelian encyclopaedia, from the patient and accomplished author of the monograph on the *Timaeus*. And our regrets for what we have not are modified by a very limited satisfaction with what we have. Although the book traverses well-worn ground, it cannot be said to popularise an erudite subject, nor yet does it present any great or definite contribution to knowledge. We must bear in mind, too, that it suffers from appearing as a posthumous work, incomplete and unrevised by the author himself ; and that a severe sense of editorial duty seems to have deterred Mr. Grote's literary executors from amending it with the freedom requisite to make it worthy of so eminent a name ; the consequence being that it is disfigured by most perplexing modes of expression and by the retention, not only of material defects, but also, in

some instances,* of the obvious slips and oversights unavoidable in a first draft.

The introductory "Life of Aristotle" is from the nature of the case the most successful, as well as the most readable, part of the book. It gives us a vigorous picture of Aristotle as a man, living at a moment the like of which the world has not seen since, and personally influenced by not a few of the great social and political causes then in operation. Here Mr. Grote's power of seizing the historical situation comes into play with admirable effect. Take, for example, his remarks on the epithet "half-Greek," more than once applied to Aristotle in recent times. After reminding us that in point of fact Aristotle's ancestry was on both sides Hellenic, that Stageira was a Greek colony, and that the epithet is not literally accurate unless we choose to regard all the Hellenic colonies as half-Greek, Mr. Grote proceeds :

"But it is true of him, in the same metaphorical sense in which it is true of Phokion. Aristotle was semi-Macedonian in his sympathies. He had no attachment to Hellas as an organized system autonomous, self-acting, with an Hellenic city as president : which attachment would have been considered, by Perikles, Archidamus, and Epameinondas, as one among the constituents indispensable to Hellenic patriotism." (I. p. 14.)

This is well and opportunely said. It has a worth, even if W. von Humboldt had another order of facts in view in the observations which have suggested the epithet. Humboldt, indeed, we must remember, was speaking of the *Poetics*, and he found it hard to imagine how a Greek of that age could have conceived such a book ; rightly or wrongly, he thought he saw something "un-Greek" in the dry light of Aristotle's intellect, in his austere and entire surrender to the pursuit of *wesentliche und nüchterne Wahrheit*. Language such as this, it is clear, was not primarily intended to be tried by an ethnological or political standard of truth.

A chapter on the *Canon* gives us a preliminary argument in favour of the general authenticity of our extant Aristotelian literature. Among the forty-seven works in the printed editions, Mr. Grote believes there are "about forty treatises of authenticity not open to any reasonable suspicion"—a statement which (whether we agree with the numerical estimate or not) implies a noteworthy admission, when we reflect that it comes from one so conservative as Mr. Grote was in all matters of criticism. The intrusion of the seven *pseudepigrapha* is plausibly explained by the hypothesis that the library of Apellicon (on which the first editors are said to have worked) was composite, and that the same was the case with the collection of Neleus, incorporated in that of Apellicon : Andronicus and his fellow-labourers, therefore, had to follow their own judgment in sifting a heterogeneous mass of documents, and distinguishing the works of Aristotle from those of Theophrastus, Eudemus, and others. Mr. Grote, it should be added, accepts the Scepsis story with all its details. We shall not just now express an opinion as to the credibility of Strabo's narrative, but we may as well confess at once to some slight sceptical prejudice whenever we hear of literature hidden away in cellars and emerging into daylight at the time when most wanted. One point in the story, however, involves some grave historical considerations. We are told that the intellectual barrenness of the Peripatetic School after the death of Theophrastus was owing to a removal (to Scepsis) of the more strictly philosophical writings of the founder : during this period of darkness the learned had little more than his "exoteric" works ; they knew him "chiefly from the dialogues, the matters [?] of history and legend, some zoological books, and the

* Here are two from the first volume :—P. 30, "Proklus ad. Joann. Philoponum;" p. 28, "Four marble animal figures" (as a translation of the Greek given in the notes, *σέιτω λίθους τερπνήσας*).

problems"—“it is certain that neither Cicero nor the great Alexandrine *literati* anterior to or contemporary with him knew Aristotle from most of the works which we now possess” (i. p. 57). Setting aside the question how Mr. Grote gets at the above list, and whether the writings specified are to be considered identical with what Strabo understood by the term “exoteric,” we cannot but note the singular discrepancy between the present estimate of Cicero’s worth as an authority and that so forcibly expressed by Mommsen. Taken at his best, however, Cicero can hardly be deemed the measure of the highest attainments of his time. To infer from him that certain books were difficult of access in his day is like arguing that Bacon must have been as good as forgotten when Lord Macaulay gave his famous Essay to an admiring public; or that Kant is never read out of Germany because some English thinkers exhibit no very intimate acquaintance with his masterpiece. Under any circumstances, Mr. Grote puts his case too strongly. Cicero confessedly knew the outside of the *Topics* and *Nicomachean Ethics*—the latter book being one of which his authorities manifestly possessed a knowledge far from superficial: Philodemus, again, was a reader of the *Economics*; and the older writer from whom Horace borrows in the *Ars Poetica* seems to have been tolerably familiar with the *Poetics*. Here, then, are some highly important Aristotelian works which, notwithstanding the paucity of data, can be shown to have been in the hands of Cicero’s contemporaries or predecessors; and if they had so much, it is a legitimate induction to say they must have had more also; but it is not equally legitimate to make our ignorance a warrant for definite assertions as to what they had not. The language about the “great Alexandrine *literati*” is unfortunate, since it may tend to encourage an illusory idea that we possess a complete or, at least, a considerable collection of their writings. The truth is that the Alexandrine period of Greek literature is practically almost a blank for us. Of the great works which might have thrown light on our difficulty, some have perished utterly and entirely; others survive, but only in fragments, in the same way as an ancient civilisation does in the mutilated records and monuments in a museum. The data being of this kind, what inference can be drawn where the evidence fails? Nevertheless, such evidence as there is does not bear out Mr. Grote’s general view (in M. Heitz we should call it “paradox”). He concedes that the catalogue of Aristotle’s writings in Diogenes Laertius represents the index of Hermippus—a theory advanced by Brandis, and slowly but surely winning its way to universal acceptance. Now, whatever our opinion as to this catalogue, it is clear from it that the Alexandrine Library must have contained our existing Aristotelian literature, or the major portion of it, or a collection of precisely similar character to ours, only of infinitely larger extent. Pergamus, also, was probably not much worse off in this respect. There was thus an ample literature in existence, and it included speculative writings by Aristotle himself, or (at the worst) works undistinguishable, as far as subject and method are concerned, from his: it is incredible, therefore, that the Peripatetic School was reduced to the destitution described by Strabo, or that its barrenness was the result of a not irreparable loss—unless we believe there was a unique and mystic virtue in the handwriting of the founder. If the School was ignorant of his works, it is more consonant with the logic of experience to attribute the fact to indifference than to sanction the hypothesis of a catastrophe. A point commonly overlooked is that marked signs of speculative atrophy did not appear till some time after the death of Theophrastus. The next Scholarch was Strato, a vigorous thinker, and one who perpetuated his teaching in books; so that in his time the

torch of science was kept burning, and the rhetoricians after him were without excuse for their apathy and ignorance. Mr. Grote, indeed, in one place, so far ignores Strabo’s story as to allow that the entire *Organon* was accessible after the Aristotelian library had become the private property of Neleus:—“as all these disciples,” he says, in reference to Theophrastus, Eudemus, and Phanias, “composed treatises of their own on the same or similar topics, amplifying, elucidating, or controverting the views of their master, the Peripatetics immediately succeeding them must have possessed a copious logical literature, in which the six treatises now constituting the *Organon* appeared as portions, but not as a special aggregate in themselves” (i. p. 80). No doubt this literature fell into neglect. The Lyceum gave itself up to rhetoric (as the Academy forgot its Platonism), and the sceptre passed into other hands—a phenomenon not without countless parallels in the history of sects and schools. So much, then, for one integral element in what we venture to term the Legend or Romance of Scepsis. The rest is of minor importance, though not devoid of difficulties. It is perhaps idle to ask, what led Apellicon to the belief that he was the fortunate possessor of the veritable autographs of Aristotle and Theophrastus; whether the discretion of this wealthy amateur was as great as his zeal; wherein he differed from the eminent savant in our own days who is said to preserve, among a number of similar treasures, a letter penned by no less a personage than Pontius Pilate! But the question as to the view Andronicus took of his MSS. is more to the point. To judge by results, he had no infallible criterion for his guidance (for he condemned the *De Interpretatione* and accepted the *Categories*); and if his materials were autographs, the only positive indication of their being this was their age or appearance of age.

We pass on to the discussion on the so-called “exoteric” works. Here—agreeing for the most part with the conclusion of M. Thurot, in his excellent *Études sur Aristote*—Mr. Grote argues that “exoteric” has a twofold meaning, and that it denotes “that which lies on the outside of philosophy considered in its special didactic and demonstrative march;” or, “that which is extraneous to philosophy and suitable to an audience not specially taught or prepared for the study”—in other words, the dialectical and rhetorical as distinct from the strictly philosophical treatment of a subject. By “exoteric discourses” (he adds) Aristotle does not of necessity refer to any other writings of his own—nor indeed to any other writings at all: “he may allude in some cases to his own lost dialogues, but he may also allude to Platonic and other dialogues, or to colloquies carried on orally by himself with his pupils, or to oral debates on intellectual topics between other active-minded men” (i. p. 70). This very comprehensive interpretation, it will be observed, embraces nearly all the narrower ones that have been proposed; among the rest, that of Bernays, who maintains (very convincingly, we think) that the term designates the dialogues. In the present state of the controversy Mr. Grote’s wider view does not seem to satisfy all the conditions of the problem.

What remains is briefly described. It consists chiefly of a sort of paraphrase or abstract of the various treatises of the *Organon*, taken book by book in their canonical order, with an occasional break to introduce a few words of criticism or comment. Some of the treatises, doubtless, lose but little by this mode of exposition. But the case is different with a work like the *Posterior Analytics*, where the subject is organically connected by assumptions, psychological and metaphysical, with a larger whole: for an adequate or even intelligible account of such a book, one seems to require a wider survey and a less literal, less mechanical, treatment of the materials.

What Mr. Grote could do, when he chose to look beyond the letter of the text before him, may be gathered from the following lucid, if slightly fanciful, illustration of the Aristotelian idea of "science":—

"What he means by Demonstrative Science, we may best conceive by taking it as a small *rêverie* or specially cultivated enclosure, subdivided into still smaller separate compartments—the extreme antithesis to the vast common land of Dialectic. Between the two lies a large region, neither essentially determinate like the one, nor essentially indeterminate like the other; an intermediate region in which are comprehended the subjects of the treatises forming the very miscellaneous Encyclopaedia of Aristotle. These subjects do not admit of being handled with equal exactness; accordingly, he admonishes us that it is important to know how much exactness is attainable in each, and not to aspire to more." (I. p. 303.)

Perhaps, after all, the most marked feature in this abstract of the *Organon* is to be found in the full and elaborate analysis of the *Topics*—where the Socratic dialectic is systematized by Aristotle into a complete logic of scholastic disputation. The evident sympathy with which Mr. Grote approaches the subject will not surprise the readers of the *Plato*.

The work ends abruptly in the middle of an unfinished chapter on Aristotle's metaphysical and physical speculations. The editors, however, with laudable anxiety that nothing should be lost or withheld, have taken upon themselves the responsibility of annexing, as an additional chapter, an essay on the Aristotelian psychology, originally contributed to Professor Bain's book, *The Senses and the Intellect*—besides bringing together, in an appendix, a variety of memoranda and literary remains more or less directly bearing on the main theme of the work. The final impression left by these volumes is one of disappointment. After all possible allowance is made, the *Aristotle* strikes one as being inferior in value (as it necessarily is in novelty and interest) to its predecessor, the *Plato*. The account of the *Organon* is not a popular exposition of Aristotle's logic for the English reader; nor is it, we imagine, calculated to supplant Zeller, still less Prantl, in the estimation of serious and qualified students. Ungracious as the avowal may seem, we would readily exchange all we have for a single chapter on the *Ethics* or *Politics*, where Mr. Grote would have spoken to us with authority, on a subject which he had confessedly made his own.

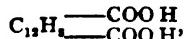
I. BYWATER.

Notes of Scientific Work.

Chemistry.

Barreswil's Test for Glucose.—It is recorded by E. Feltz (*Comptes rendus*, 21st October, p. 960) that on testing a solution of crystallizable sugar for traces of glucose with the copper solution, he found cane sugar also able to reduce this metallic solution. 10 c.c. of this reagent, prepared by Violette's method, when boiled with 20 c.c. of a solution containing 6 grammes of purified sugar, for 25 minutes, lost its blue colour, all the copper being precipitated. The author calls attention to the fact, that, though different methods have been given for the preparation of this reagent, the essential difference between them consists in the amount of free alkali present. The greater the amount of alkali in the liquid the more clearly and sharply is the presence of glucose indicated by it. For his experiments with cane sugar he prepared two solutions: (a) containing 0·632 gramme of free soda in 10 c.c., and (b) containing 1·34 gramme of alkali in the same quantity. By boiling 20 c.c. of liquid containing 6 grammes of sugar with 10 c.c. of a, the colour disappeared in 25 minutes; when, in place of the latter, 10 c.c. of b were used, the colour vanished in 6 minutes. During some further experiments he noticed that 10 c.c. of b even lost all colour by being boiled with 0·6 gramme of pure crystallized sugar for 30 minutes.

New Hydrocarbon.—At the Leipzig *Versammlung Deutscher Naturforscher*, Professor Fittig announced the discovery of a hydrocarbon from coal-tar. It melts at 98°–99° C., and has a boiling-point considerably above that of anthracene. By oxidation it yields a dibasic acid,



which has led the author to the belief that this new body is very probably phenyl-naphthaline, $\text{C}_8\text{H}_6\text{C}_6\text{H}_5$.

Seebachite.—This name has been given by M. Bauer (*Zeitschrift der deutschen geologischen Gesellschaft*, xxiv. p. 391) to a new mineral, occurring in the basalt of Richmond, near Melbourne, in association with phillipsite and other minerals, and hitherto regarded as herschelite. Though fully agreeing with the latter mineral in crystallographic characters, seebachite differs from it in chemical composition, notably by a considerable percentage of lime. The empirical formula of seebachite is $\text{R}_4\text{Al}_2\text{Si}_2\text{O}_{12} + 12\text{H}_2\text{O}$, R being calcium and sodium.—In the same paper the author describes a crystal of calcite, from Andreasberg, exhibiting hemimorphism.

Fermentation.—In a communication made to the *Académie des Sciences* (October 7), M. Pasteur has shown that his celebrated theory of ferments admits of being expressed in a general form which is probably true of all living organisms. Every living thing, in fact, or part of one, however small, which, without absolutely ceasing to live, is deprived in whole or in part of oxygen, possesses the character of a ferment for that substance which seizes it partially or completely as a source of heat. If a fermentable fluid be inoculated with a ferment, the surface will speedily be covered with a coat of mould; this absorbs oxygen from the atmosphere, and gives off carbonic acid gas, but produces no alcohol. If the liquid be now agitated so that the coating of mould is submerged, fermentation will speedily commence under the proper conditions, and alcohol will be formed with the evolution of carbonic acid. Ferments are, therefore, organisms which can continue their existence and even grow without the intervention of free oxygen being necessary to burn and render available the materials for their nutrition; they can, in fact, assimilate directly oxidized matters, such as sugar, capable of producing heat by their decomposition. From this point of view fermentation appears to be a particular case of an exceedingly general phenomenon, and it may be said that all living things are ferments under certain conditions, because there are some which cannot momentarily be deprived of free oxygen. Under these circumstances they obtain the heat required for their nutrition or for changes in their tissues from surrounding objects; and it is a characteristic feature of fermentation that the amount decomposed is sensibly greater than the weight of material made use of in effecting the decomposition. Berard has shown that fruits kept in carbonic acid, or any inert gas, evolve carbonic acid, as if by a kind of fermentation. Pasteur made the experiment with plums, which after some days were far less altered in appearance and texture than those exposed to the air, but yielded a distinct amount of alcohol. A rhubarb leaf placed in an atmosphere of carbonic acid, after 48 hours produced, by distillation, small quantities of alcohol. With regard to animal organisms, Pasteur has not yet followed out his theory, but he believes it will throw an altogether new light on putrefaction and gangrene. The production of putrid gases without the intervention of organic ferments will receive, in this case, an explanation as natural as the production of alcohol and carbonic acid in the presence of the cells of yeast.

Mineralogical Notices.—At the last meeting of the Chemical Society, held on the 7th instant, a paper, bearing the above title, and forming a continuation of an earlier one, was read by N. S. Maskelyne and W. Flight, of the British Museum. The authors find by analyses of the original fragment to which Haidinger gave the name, and of several so-called specimens of the mineral from other localities, that isopyre is a mixture of opal with other substances, and can no longer be regarded as a distinct species. The mineral percylite, of which but one specimen, that in the National Collection, has hitherto been known, and the locality assigned to which is Sonora, Mexico, has been found in South Africa associated with anglesite, cerussite, and chlorargyrite. The chemical composition and physical characters fully accord with those of the unique specimen analysed by Dr. Percy.—Among other minerals from the same district in South Africa was found vanadinite in considerable quantity and great purity. The crystals are six-sided prisms, $\bar{2}\bar{1}\bar{1}$, surmounted by the regular six-faced pyramid {100, 122}; they also carry a scalenohedron {201}. The question whether the inverse correlative scalenohedral planes are present on these crystals is difficult to determine with certainty through their broken and incomplete character. But that the discaenohedron is not hemisymmetrically developed, in the way characteristic of apatite, seems certain from the position of some adjacent planes that are found on the crystals.—An analysis of a small specimen of impure uranophyllite from the neighbourhood of Redruth, in which the simultaneous presence of arsenic acid and bismuth was observed, is of interest to the mineralogist on account of the very recent discovery of trögerite, zeunerite, and walpurgine in the Weisser Hirsch mine at Neustädtel, and the great probability of the existence of these minerals in Cornwall.—Analyses of pisolithic iron ores from Wales, and a specimen of prasine from Cornwall, occurring occasionally with the so-called white olivenite, are also given in this paper.

Aldol.—The history of this body has already been given in the *Academy* of July 15 (vol. iii. p. 271). Wurtz has since described (*Revue*

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scientifique, 26th October, p. 405) some improved methods of obtaining the new substance, and while doing so has protested against the very violent criticism to which Kolbe has subjected him. Kolbe believes that the new body $C_6H_4O_2$ cannot be characterized as aldehyde-alcohol till its nature is better known. Wurtz administers a well-deserved rebuke to the Leipzig professor for passing judgment on his work before it is completed. So far, his experiments justify him in assigning the formula $CH_3-CHOH-CH_2-CHO$ to the new compound.

The Influence of the Food on the Composition of the Urine.—The nature of the change in the composition of the urine brought about by varying the character of the food has recently been carefully investigated by Weiske, of Proskau (*Zeitschrift für Biologie*, p. 246). He selected for the purpose two goats, one of which (I.) was fed on fresh clover and turnip leaves; the other (II.) entirely on milk. The urine in case I. was cloudy, exhibited an alkaline reaction, and effervesced with acid just as the normal urine in Herbivora does. In the other case (II.) the urine was completely clear, showed an acid reaction, contained no carbonic acid, and possessed all the properties of the urine of the Carnivora. 100 cubic cent. contained in each case :—

	I.	II.
Dried substance	11.08 gramme	1.75 gramme.
Nitrogen	1.11 "	0.33 "
Hippuric acid	0.10 "	0.00 "
Ash	5.19 "	0.57 "

It is worthy of note, in the case of the goat fed on milk, that the large amount of nitrogen present in the urine is out of all proportion to the comparatively small degree of concentration.

Professor Tschermark has published a new catalogue of the meteorites in the Vienna collection. At the date of issue (October 1, 1872) the mineralogical museum contained specimens representing 182 falls of meteoric stones and 103 falls of meteoric iron. Letters appended to the name of each aérolite in the list indicate its position in a classification which has been based chiefly on the constituent minerals, certain distinctive physical characters of these minerals also being used in arranging them in subdivisions.

Zoology.

Prehistoric Remains of the Fallow Deer and Dog.—In a treatise on the prehistoric antiquities of Olmütz and the surrounding country, published in the *Mittheilungen der anthropologischen Gesellschaft zu Wien*, Professor L. H. Jeitteles, in his researches respecting the antiquity of certain animals, has arrived at some conclusions of great zoological interest :—1. The fallow deer is not, as generally supposed, a recent importation from Africa, but was distributed all over Europe during the diluvial period, and in still later times. Subfossil remains of this species have been found in the neighbourhood of Rome, in Southern Russia, at Linz in Upper Austria, in Württemberg, Baden, and at Abbeville; and the author himself has obtained part of a horn at Olmütz. 2. The dog of the Bronze age is a distinct species from that of the Stone age, and is distinguished in being of considerably larger size. Besides the common wolf, Prof. Jeitteles divides the wild dogs into two groups : a. The jackal of the Mediterranean fauna (*Canis aureus*), which is the wild ancestor of the domestic dog of the Stone age. b. The prairie-wolf of North America, the wolf-dog of North Africa (*Canis lupaster*), the Pyrenean wolf, the prairie-wolves of Eastern Europe, the dingo, F. Cuvier's *Canis anthus mas* from Senegal, and perhaps the wolf of Japan, are varieties of one and the same form which may be termed *Canis lycoides*, and which appears for the first time in a domesticated state in the Bronze age; this domesticated form is named by the author *Canis matris optimae*.

Geschichte der Zoologie bis auf Joh. Müller und C. Darwin. Von J. Victor Carus. München.—Many of our readers will be aware that the Bavarian Academy of Sciences some years ago appointed a commission to prepare and publish a complete history of the natural sciences in Germany. The idea originated with the present king of Bavaria, who has supported the undertaking in a most munificent manner. The entire work, which will be extended over about twenty-four volumes, is arranged in three sections, the third of which comprises technology, mathematics, physics, chemistry, astronomy, geology, medicine, zoology, botany, and mineralogy. The volume before us is devoted to the history of zoology, and since it would have been inadvisable to limit a description of the development of zoological science to that due to Germany alone, the author has extended it to the zoology of all countries and times down to the death of Joh. Müller, and the first promulgation of Darwin's doctrines in 1858-59. We fully recognise the great difficulties of the task undertaken by Professor Carus, especially when we consider that this is almost the first attempt of the kind; we feel sure, however, that the author, who has been engaged in bibliography for so many years, would, with more time at his disposal, have executed the work in a much more satisfactory and uniform manner. In its present form, fully two-thirds of the work are devoted to the history of the ante-Linnean period—the easier portion, as its details have been previously elucidated by numerous and profound researches. It was highly desirable, however, that a connected account

of this period should be given, and the reader is well repaid by the mass of information he will find here. The space allotted to the post-Linnean period is out of all proportion too small, provided the author intended to give it the detailed consideration he has in some instances attempted. A dry enumeration of authors and their productions neither instructs the zoologist (who, by the way, will miss many a familiar name, like those of Dampier, Mitchill, Cantor, Reinhardt, &c.) nor interests the general reader. The whole work is arranged under three divisions : A. The Zoological Knowledge of the Ancients ; B. The Zoology of the Middle Ages ; and C. The Zoology of the more Recent Times. The last is again subdivided into three periods : 1. Period of the Encyclopaedic Accounts (Gesner, Jonston, &c.); 2. Period of Systematic Attempts (Linnean period); and 3. Period of Morphology (Cuvier, Müller).

The Thanatophidia of India: being a Description of the Venomous Snakes of the Indian Peninsula; with an Account of the Influence of their Poison on Life, and a Series of Experiments. By J. Fayerer, M.D. London. With 31 coloured plates.—This work is divided into five sections. In the first a descriptive account is given of the venomous snakes of India; and as the author informs us that he has compiled this portion from the researches of other herpetologists, we may at once pass to section 2, containing statistical returns of the deaths by snake-bite that have occurred in the Bengal presidency. The author shows that the total number of such deaths recorded from the year 1869 alone amounts to 11,416 in an area presenting a population of 121,000,000 souls; and he thinks that this number, large as it is, cannot represent the real mortality in those provinces, on account of the incomplete reports received from some parts of the country. Were perfect information available and collected from the whole of India, Dr. Fayerer believes we should find that more than 20,000 persons die annually from snake-bite alone. After the author has thus opened our eyes in respect to this terrible destruction of human life, it is to be regretted that he is obliged to leave the question of the treatment of snake-bite, discussed in the third section of the work, exactly as it was. If the immediate endeavours to prevent absorption of the poison into the system are unsuccessful, as unfortunately is but too frequently the case, reliance is placed on alcoholic, ammoniacal, or ethereal stimulants for supporting the strength, and consecutive disorders of constitutional or local character are treated with such remedies as the peculiar symptoms may suggest. In section 4 the circumstances of a number of cases of snake-bite are narrated, and in section 5 a great number of experiments on the influence of snake-poison on animals described. While most of the conclusions arrived at were previously known, the following deserve particular attention, either because they are not quite in accordance with the views generally held by herpetologists, or in that they confirm previous isolated observations. 1. Differences have been noticed in the symptoms produced by the bites of different species, though none of them are of any great physiological or pathological importance; they are more of degree than of kind. In certain cases convulsions are more marked, and in others death is preceded by a more decided appearance of lethargy: in some local symptoms are peculiarly severe, in others less so. 2. After death from poisoning by a colubrine snake, the blood nearly always firmly coagulates on removal from the body; after death by viperine poison, however, it remains permanently fluid. 3. The power to resist the action of the poison varies generally, though not altogether, with the size of the animal bitten; it has been noted that cats resist the influence of the poison almost as long as dogs three or four times their size. 4. The poisonous snakes are not affected by their own poison: a cobra may bite itself or another cobra with impunity. It is probable that they are not entirely without effect on each other, though it is infinitely less than that produced on other animals. 5. Snake-poison is absorbed through delicate membranes; its action is fatal if it be applied to a mucous or serous membrane, to the stomach or the conjunctiva. The belief that it is only capable of absorption by direct injection into the blood is erroneous. 6. Bodies of animals which have been poisoned by snakes are eaten with impunity by man and animals. 7. The blood of an animal killed by snake-poison is itself poisonous; if injected into another animal, it destroys life. The long series of experiments on which Dr. Fayerer has been engaged could not have been conducted without great risk to those concerned in them. On two occasions only was there any cause for anxiety, and by the immediate application of remedies no injurious results happened. The work is illustrated by thirty-one coloured plates, which, highly creditable to the artists who prepared them, have been drawn at the School of Art in Calcutta. They fully answer the purpose of the work, which is more of a practical than scientific character.

The Birds of New Zealand.—In the *Academy* of May 15 (vol. iii. pp. 189, 190) we recorded the first appearance of Dr. Buller's work, *A History of the Birds of New Zealand*. We have now the pleasure of announcing the more recent publication of a second part, comprising pp. 73-140 and seven plates. The standard of excellency of the first part is maintained in the second, both as regards text and illustrations.

The Cabbage Butterfly in the United States.—According to Dr. Uhler, of Baltimore, the European cabbage butterfly (*Pontia brassicae*), in its invasion of the United States, has at length reached Baltimore. It has been found for some years farther eastward, and has been slowly creeping onwards until it bids fair to ravage the whole country. (*Annual Record of Science*, 1872, p. 270.)

The tenth part of the *Anales del Museo Pùblico de Buenos Aires* (Buenos Ayres) contains the conclusion of Professor Burmeister's monograph of the Glyptodont Mammalia (see *Academy*, vol. iii. p. 73). In this part the author gives a comparative description of the subgenera *Glyptodon* and *Schistopleurum*, illustrated by six beautifully executed lithographic plates.

New Publications.

- ACCHIARDI, D. A. Mineralogia della Toscana. Vol. I. Pisa.
 BACHMANN, P. Die Lehre von der Kreistheilung und ihre Beziehung zur Zahlentheorie. Leipzig : Teubner.
 BAUMHAUER, H. Die sogenannten allgemeinen Eigenschaften der Körper nach ihrem Zusammenhange entwickelt. Hildesheim : Gerstenberg.
 BRACCIFORTI, A. Dello Studio delle Scienze fisiche e naturali. Piacenza : Marchesotti.
 BRUNS, H. De Proprietate quadam Functionis Potentialis Corporum Homo Generum. Berolini.
 DARWIN, C. The Expression of the Emotions in Man and Animals. Murray.
 DU BOIS-RAYMOND, E. Ueber die Grenzen des Naturerkennens. (Vortrag.) Leipzig : Veit.
 DUHAMEL, J. M. C. Des Méthodes dans les Sciences de Raisonnement. 5^e partie. Paris : Gauthier-Villars.
 DU MONCEL, T. Exposé des Applications de l'Électricité. Paris : Lacroix.
 EHRENCHEF, C. G. Rede auf A. v. Humboldt. Berlin : Oppenheim.
 FELDNER, A. Die Ansichten Sebastian Franck's v. Woerd, nach ihrem Ursprunge und Zusammenhange. Berlin : Calvary.
 GAVAT, J. Étude sur les Corps étrangers de la Conjonctive et de la Corneé. Paris.
 KJERULF, T. Om Skuringmaerker Glacialformationen og Terrasser. Christiania.
 MEYER, L. Die modernen Theorien der Chemie und ihre Bedeutung für die chemische Statik. 2. Auflage. 1. Hälfte. Breslau : Maruschke und Berndt.
 OTTERDINGER, L. F. Ein Manuscript Keplers. Tübingen : Fries.
 SALET, G. Sur les Spectres des Métalloïdes. Paris : Gauthier-Villars.
 SCHEINS, M. De Electro Veterum Metallico. Berolini.
 STOPPANI, A. Corso di Geologia. Milano.
 ULRICH, W. Internationales Wörterbuch der Pflanzennamen in lateinischer, deutscher, englischer und französischer Sprache. Leipzig : Schmidt.
 WEBER, A. Kritik der Psychologie von Beneke. Weimar : Böhlaus.
 WIJK, F. J. Om Skifferformationen i Tavastehus Län. Helsingfors.
 WOHLWILL, E. Der Inquisitionsprozess des Galileo Galilei. Berlin : Oppenheim.

History.

Calendar of the Clarendon State Papers preserved in the Bodleian Library. Vol. I. To January 1649. Edited by the Rev. O. Ogle, M.A., and W. H. Bliss, B.C.L., under the direction of the Rev. H. O. Coxe, M.A.

FULLER'S well-known definition of an index as "a necessary implement," failing which the student wanders in a threadless maze, is eminently appropriate in this useful and laborious *Calendar*, the first volume of which is now before us. The masses of political and social history for which the whole work will supply the clue form the famous collection gathered by the royalist chronicler of the Great Rebellion as materials for that *History*. This collection has arrived in several instalments and at various dates to its final repository; the first portion reaching the Bodleian Library in 1759, while the last—a large and highly important body of documents, bequeathed by Henry Hyde, Earl of Clarendon, in 1753—was only received at Oxford in 1866. Consequently, the three folios published in 1786 by the University, comprising

a very large selection from the Clarendon State Papers up to that time in its possession, include no portion of its latest acquisition. The folio selection has, moreover, been now long out of print, so that on all hands the student will be grateful to Messrs. Ogle and Bliss for their *compte rendu* of documents throwing the fullest light on so important a period of English history. Of the three thousand papers here calendared, those employed by Hyde for his *History*, with letters both public and private addressed to himself, are endorsed by his own hand. Copies of his own letters and the correspondence of his secretary Edgeman form another important part of the collection, which also includes many holograph drafts and letters of Charles and his queen. The papers, which cover the whole period of Charles' reign up to his execution in January 1649, are chronologically arranged, and to the outline of most documents now in print is affixed a reference to the full text.

So far as an opinion can be formed from abstracts, we should say that, while the broad facts both of the progress of the Civil War and the personal history of its chief actors have been long before the world, abundant matter rich in details of more or less importance still lies in manuscript. This point may be fairly illustrated in reference to the historical masterpiece which was the growth and outcome of all the gathered material. Clarendon has in his *Life* himself sketched out for us his tranquil and studious existence in Jersey, from the spring of 1645 to that of 1648, the time which saw that work planned and its first four books written, but the accessories of the picture remain to be filled in from his correspondence during that season of retreat. Writing to Lord Witherington in August 1646, Hyde first announces that he has "prevailed with himself to endeavour the compiling a plain faithful narrative of the proceedings of these ill years." On November 15, in the same year, he writes to Secretary Nicholas for information of all kinds for the *History*, of which he has now written about sixty sheets, which, if printed, "would exceed what Daniell hath written of twelve kings; to what a Book of Martyrs will the whole volume swell!" The whole tenor of the Jersey correspondence goes to show that the chronicler of the royalist martyrs had no mind to swell their number in his own person, presenting at the same time, we think, a noteworthy example of that proverbial absorption of mind induced by literary pursuits. It is pretty clear that while Hyde, in his own "wonderful contentment," dresses the facts and paints the characters of his narrative, the disasters of his country, the ruin of his friends and cause, even the deadly peril of his master, these things fall naturally into the background of his mind. Take, for instance, Hyde's correspondence after the opening of 1647, when the series of news-letters marks the progress of events as hurrying on towards the scaffold before Whitehall, and the king's despatches Nos. 2400, 2411, 2461, breathe the language of despair. How entirely out of keeping with the stern realities of the time is the chancellor's gossip over his studies varied by reading "ill-books, such as Lilburne's, Prynne's, and Mr. Milton on Wedlock," No. 2488, his liberal information touching the progress of his *History*, and eager quest for materials from all quarters, mixed up with parenthetical forecasts of "fine days after the dismal storm," No. 2658. Goethe polishing his verses at Weimar while French troops harried Germany hardly affords a more striking spectacle of philosophic equanimity. Indications are not wanting that Hyde's friends, themselves out in the storm, were at issue with him as to his own line of conduct. They unreasonably refused to accept that personal view of it which, formulated into the motto, *Bene vixit qui bene latuit*, stood blazoned over his doorway in Castle Elizabeth. Most of

them, the king included, judged the chancellor's retirement as a secession from the important trust committed to his charge in the person of the Prince of Wales, and he seems to have been repeatedly reproached for not following him to St.-Germain. Now here we find copies of Hyde's answers to the king and others vindicating his conduct ; but how comes it that the letters of blame themselves have all vanished ? We note this fact as highly characteristic of the man, and also because a more striking illustration of the way in which the chancellor sifted his papers for the eye of posterity occurs at an earlier date. No part of Hyde's narrative has cast graver doubts upon his truthfulness as an historian than the account of his personal action in the Long Parliament between the introduction of the bill of attainder against Strafford and the passing of the Grand Remonstrance—April—November 1641. It is strongly suspected that Hyde, though in the *History* he labours to create the contrary impression, was a party both to the attainder of Strafford and to the existence of the parliament independently of the king ; he also stands charged with having falsified the circumstances under which the Grand Remonstrance was passed. Now among the despatches of those months, not a single document throwing light upon these important questions survives to be calendared. We offer no comment upon their conspicuous absence. The fact that Strafford's famous letter from the Tower, May 4 (No. 1527), appears endorsed by Clarendon's own hand is, as Mr. Ogle remarks, a strong piece of evidence in favour of its genuineness.

Among the various series of papers worthy of special attention, those upon foreign affairs running over the years 1637–40 present, with some exceptions, fresh matter. They mark the utter weakness of English intervention in the affair of the Palatinate, showing that England under Charles had in the eyes of foreign nations sunk down to the same level of insignificance to which fifty years later Spain had fallen. Among new materials illustrative of negotiations in behalf of the royal cause carried on in Ireland, the most important are letters from Charles to Ormond, written in 1645–6, which seem likely, if fully examined, to throw additional light on the secret dealings with the Council of Kilkenny, entrusted by the king to Glamorgan. To the same date belong despatches, mostly not yet printed, detailing the movements of the army of the West, and amply illustrating the disorganization, rapine, and confusion upon which the royalist historian dwells with mournful emphasis. As specimens of single documents deserving particular notice, Nos. 1764, 2887, 2978 may be cited. The first of these, in the same handwriting as a paper endorsed by Hyde, "Sir Hugh Cholmeley's Memorials," gives a minute account of the battle of Marston Moor ; the second, partly printed in the Clarendon State Papers, is Lord Byron's history of his proceedings in Cheshire and Anglesea, February—September 1648. Judging from the abstract, Byron's narrative is important enough to raise surprise at the very slight use of it made in the *History*. The main point of interest in the outline given by Mr. Bliss lies in reiterated charges of active disloyalty brought by the royalist general against Williams, Archbishop of York. Everything tending to throw light upon the character of that able but unscrupulous prelate deserves to be made public. But the charge is entirely passed over by Clarendon ; did he himself disbelieve Byron's statements, or was he unwilling to tarnish an archiepiscopal reputation ? No. 2978 is a narrative of the surprise of Pomfret Castle in 1648, and the subsequent action of the royalist garrison up to the retaking of the castle by Cromwell after his return from Scotland. This paper, drawn up after the king's death "by one of those concerned in the despatch of Rainsborough,"

is noted by Mr. Bliss as differing in many particulars from Hyde's version of this episode of the war ; the abstract is, however, too meagre for purposes of comparison. And lastly, we should much like to see in print the full text of the letters of intelligence, a most valuable series, during the years 1647–8.

Calendared as addenda are above three hundred copies of letters addressed by Queen Elizabeth to foreign princes during the early years of her reign. These despatches, which have not been used by Mr. Froude, will doubtless well repay examination. Elizabeth's letter to Gustavus of Sweden, declining marriage with his son on the score that "God has filled her heart with the joys of celibacy ;" those to Italian princes pressing for payment of moneys due ; a warning to Mac 'Art More that, "next to the service of God, nothing is of more consequence than obedience to the prince ;" her resolution, expressed to Lutheran sovereigns, that, "in spite of the devil," the creed of her Anglican Church shall be conformed to the Augsburg Confession—may be quoted as characteristic of the daughter of Henry VIII. Lastly, the appendices contain despatches touching the marriage of Charles I. and the love-letters which passed between him and Henrietta Maria, the latter printed in full. Mere stereotype complaisances of royal courtship, these holographs owe their chief interest to the dramatic contrast they oppose to the correspondence of the wedded pair during the last years of the king's life—letters where the wife shows herself a dangerous partner in the losing game, and the husband lays bare without stint those deep defects of character for which he paid forfeit with both crown and life.

GEORGE WARING.

History of Old Rhaetia. [Das alte Ractien, staatlich und kultur-historisch dargestellt von Dr. P. C. Planta. (Hierzu zwei Tafeln.)] Berlin : Weidmann.

THIS work has been a labour of love to Dr. Planta, who dedicates it to the Swiss cantons of the Grisons and St. Gall, as being parts of the ancient Rhaetia. He collects all that is known of Rhaetia from the pre-Roman times, down to the occupation of the country by the Germans, its civil division into *Gaus*, and its ecclesiastical organization as connected with the bishopric of Chur. The appendices contain an excellent map, together with the necessary extracts from the Peutinger table (of which a facsimile is given), the Antonine Itinerary, and the *Notitia Dignitatum*; Bishop Tello's will (A.D. 766) ; a diploma of Charlemagne, appointing Bishop Constantius "Rector of Rhaetia," and so his successors "ex nostro permesso et voluntate cum electione plebis" ; Bishop Remedi's Penal Code ; the *Lex Romana Curiensis* ; a diploma of Louis the Pious in 831, exempting the possessions of the church of Chur from civil jurisdiction or taxation ; and a Rent-roll of the church in the eleventh century. The latter part of the book is satisfactory, the materials being more abundant. Of the early history of Rhaetia, however, it is needless to say that we know next to nothing, and our author has to fill up his sketch as he can. Thus, as he thinks the northern slopes of the Alps were occupied by Kelts, he gives an account of Celtic customs and religion in general, as being presumably true of the Rhaetian Kelts also. We have no objection to the account, except that it has no peculiar application to Rhaetia. The description of the Etruscan inhabitants in the southern valleys has to be filled up in a similar manner. As to the name Rhaeti, which occurs first in Polybius as 'Paxoi,' our author acquiesces in the derivation given by Theodoric, the Gothic king, that it comes from the Latin word "retia" (nets), because the country is composed of a network of

valleys, which "contra feras et agrestissimas gentes velut quaedam plagarum obstacula disponuntur." But with all our respect for King Theodoric, as tribes generally give names to countries, and not *vice versa*, we can hardly derive the name of an Etruscan or Keltic tribe from a metaphorical use of a Latin word, not to mention other obvious difficulties. Our information as to the various Rhaetian clans really depends on Augustus' triumphal inscription at Turbia, near Nice (Pliny, iii. 30, enumerates the names of the Alpine tribes in accordance with it), which gives a list of them from east to west. Some of the names still survive, e.g. the Camuni must have lived in the Val Camonica. Strabo and Ptolemy supply some help, and there was fortunately found in the South Tyrol in 1869 a bronze tablet containing an edict of the Emperor Claudius in A.D. 46, relating to four Rhaetian communities, two of which are the Anauni (in the Nonthal), and the Bergalei, whose name survives in a valley opening out towards Chiavenna. In fact, inscriptions are our main resource for provincial history under the Empire, as may be at once seen from the fifth volume of the Berlin *Corpus Inscriptionum*, just published by Mommsen, which contains the inscriptions of Cisalpine Gaul, including those of Trent and other Rhaetian districts on the south of the Alps. Dr. Planta is a little grieved at finding so little mention of his favourite Chur, the original name of which can only be guessed at. The account of the organization of a Roman province is well arranged. Of course the introduction of Christianity is obscure, but Dr. Planta does not like the legend which assigns the foundation of the bishopric of Chur to the famous British king Lucius, who was martyred there A.D. 178, and has a special commemoration in the service-books of the *Ecclesia Curiensis* (the early printed copies of which are rare, but there are several in England). King Lucius' body was stolen from the cathedral in 821 by a Count Roderic, as the Bishop complains in a letter to the Emperor Louis the Pious. The first real historical trace of the bishopric occurs in 452, when the Bishop of Como signed the decrees of the Council of Chalcedon for himself and "for his absent brother Asimo, bishop of Chur." The bishops played an important part even after the German counts took the lead and the *Gau*-constitution had been introduced. The name Vinstgau, in the valley of the Adige, curiously preserves the memory of the early tribe of the Venostes, mentioned in the Turbia inscription, and of the German constitution of Rhaetia in Charlemagne's time. Dr. Planta's book possesses more than a local interest; it gives an excellent account of the process of fusion between the Roman and Teutonic elements of modern Europe.

C. W. BOASE.

Origines de l'Allemagne et de l'Empire germanique. Par Jules Zeller, ancien Recteur de Strasbourg. Paris: Didier.

THE words, "ancien Recteur de Strasbourg," give the key to this work, which embodies the grief of France at the loss of Lorraine and Alsace. Of course there is a long preface against Bismarck, and the author takes particular delight in quoting passages of ancient authors which describe the Germans as fond of invading and plundering their neighbours, e.g. Caesar, iv. 13, "latrocinia nullam infamiam habent quae extra fines civitatis fiunt." The ancient Gauls, it must be inferred, always stayed quietly at home, and did not plunder Italy, Greece, and Asia Minor. The spirit of the book is lamentable, and can only be excused by the soreness of defeat, and by the ungenerous conduct of the German *literati*. Thus during the siege of Paris, Mommsen wrote an account of the siege of Rome by the Goths, describing the cowardly multitude sheltered behind the walls; and how

the government offered any amount of money for peace, but vaunted that they would not surrender an inch of territory, and so on. The geographical sketch of Germany, illustrated by a map, is the best part of Zeller's book, which goes down to Charlemagne's time, being only the first volume of an extensive work. We must hope that by the time the second volume appears, the author will have adopted something more of the tone that befits a historian. C. W. BOASE.

Contents of the Journals.

Gött. gelehrte Anzeigen, September 18 and 25.—Liebrecht has articles on the Turkish tribes in South Siberia, and the Polynesian tribes in the Pacific, showing what portions of their customs and legends recur elsewhere, and form part of the common stock of the early human race, and so throw light on some customs and legends of Europe. The early religious rites are especially instructive, and may be compared with much in Tylor's book.—October 2.—Geiger reviews Knaacke's *Jahrbücher des deutschen Reichs und der deutschen Kirche im Zeitalter der Reformation* unsavourably.—Perlach calls attention to the real sources of the history of the Teutonic Order.—Bluhme gives an account of the Vatican and Paris MSS. of the Visigothic Law.—October 16.—Ewald reviews Wuttke's excellent *Geschichte der Schrift und des Schriftthums*; and Kraut analyses the contents of the archives of Lüneburg.

New Publications.

- FONTES RERUM BOHEMICARUM. Tom. I. Vitae Sanctorum. Fasc. 3. Prag: Grégr u. Dattel.
 GERLACH, F. D. Griechischer Einfluss in Rom im fünften Jahrhundert der Stadt. Basel: Schneider.
 IHNE, W. Römische Geschichte. 3. Band: Die äußere Geschichte bis zum Fallo von Numantia. Leipzig: Engelmann.
 KAYSER, F. Ueber das Leben und die Schriften des heiligen Nicetius, Erzbischofs von Trier. Trier: Lintz.
 KREBS, J. Christian von Anhalt und die kurpfälzische Politik am Beginn des dreissigjährigen Krieges. Leipzig: Duncker u. Humblot.
 MURATORI, L. A. Scripti inediti. Milano: Längner.
 PUNTSCHART, V. Die Entwicklung des grundgesetzlichen Civilrechts der Römer. 1. Abth. Erlangen: Deichert.
 REGESTA DIPLOMATICA nec non Epistolaria Bohemiae et Moraviae. Pars II. Annorum 1253-1310. Vol. I. Prag: Grégr u. Dattel.
 RILLIET, A. Der Ursprung der schweizerischen Eidgenossenschaft. Geschichte und Sage. Aarau: Sauerländer.
 SPRINGER, A. Friedrich Christoph Dahlmann. Leipzig: Hirzel.
 STAATSARCHIV, Das. Sammlung der offiziellen Actenstücke zur Geschichte der Gegenwart. Begründet v. Aegidi u. Klauhold. Hrsg. v. H. von Kremer-Auenrode u. F. Worthmann. 22. Bd. I. u. 2. Heft. Leipzig: Duncker u. Humblot.
 WAILLY, N. de. La Conquête de Constantinople par Geoffroi de Ville Hardouin. Paris: Didot.

Philology.

- A Critical Enquiry into the Bases of the Decipherment of the Assyrian Inscriptions. [Die assyrisch-babylonischen Keilinschriften. Kritische Untersuchung der Grundlagen ihrer Entzifferung.] By Dr. Eberhard Schrader. Leipzig: Brockhaus.
 The Cuneiform Inscriptions and the Old Testament. [Die Keilinschriften und das Alte Testament.] By the Same. Giessen: Ricker.

WHILE the study of the Assyrian inscriptions has long been attracting a considerable body of workers in France and England, Germany, the home of Grotfend and Lassen, has been more or less content to look on. This, however, can no longer be said to be the case. Professor Schrader, already well known to Assyrian scholars by his papers in the *Zeitschrift der deutschen morgenländischen Gesellschaft*, the *Studien und Kritiken*, and elsewhere, has now offered a valuable contribution to our knowledge of the monuments and their language in the two works before us. The first of these may be called an Apology for Assyrian.

decipherment. It is an exhaustive analysis of the method employed, and a critical testing of its results. The first part reviews the several means of assistance which have been at the disposal of the decipherers, beginning with the trilingual inscriptions of Persia, and going on to the variant readings furnished by parallel texts, and the invaluable aid as well as verification afforded by the philological tablets of Assur-bani-pal. Specimens of these are given, and a syllabary is made out from the native records themselves. The section concludes with the help furnished by the sculptures which accompany the inscriptions, by the tradition of ancient history, and by the philological laws which determine the reading of a word. Next follows a thorough-going exposition of the Assyrian syllabary and ideographs, controlled by reference to the Achaemenian monuments, and the proof and explanation of the polyphony of the characters. This is supplemented by an admirable excursus on the difficult subject of the proper names; and the whole finishes with the bilingual (Assyrian and Phoenician) legends which decisively confirm the decipherment as before set forth.

The second part consists of a full and excellent account of the language (on the basis of the Persian inscriptions), upon its lexical, phonological, and grammatical side; from which its thoroughly Semitic character is made apparent to everyone. The conclusions to be drawn from the preceding portion of the work are well put, and the Assyrian text of the Achaemenian inscriptions with a translation is appended.

The author must be congratulated upon the clearness, pertinency, and exhaustiveness with which he has completed his task. Rational scepticism will henceforth be impossible, while the accuracy and acuteness displayed in the grammatical part of the work will be particularly welcome to the scholar. The section on the numerals must be more especially noted, in which the formation of the decades is admirably explained and compared with the Aethiopic; and the section on the pronouns is equally good. The explanation of the obscure *mala*, "as many as," from מְלָא is undoubtedly right, in place of the one suggested in my *Grammar*; but the attractive reference of the enclitic *ma* or *va* to the *waw consecutivum* can hardly be maintained in the face of a phrase like *ina sanat-ma siati*, "in this very year" (*W. A. I.* iii. 8, 75). In the verb, Dr. Schrader and myself are at variance as regards the explanation of certain forms, though not as regards their meaning. The double letter of what I hold to be a Kal present is not formative, but merely marks the accent of the preceding vowel, exemplifying one of the obscurities of the Assyrian system of writing. The tense is exactly parallel with the Aethiopic *yēndyēr*, and it is difficult to see how Dr. Schrader can overlook the evidence of the syllabary he has printed in pp. 20-24, where the Pael present *yunaccar* answers to the Accadian *in-kurri*, and the Pael aorist *yunaccir* to the Accadian *in-kur*, just as the Kal present *isaccin* answers to *in-garri*, and the Kal aorist *iscun* to *in-gar*. The permansive of Dr. Hincks is the perfect of the cognate dialects, the name being adopted only because that of the perfect had been set apart for another purpose, and I cannot understand how Dr. Schrader can explain such forms as *pupua rabacu*, *acala dabsacu*, "crops I increase, corn I mature" (*W. A. I.* ii. 60, 14), otherwise than as verbs. Indeed he seems himself to admit this in note 3, p. 266.

The second work (already noticed in the *Academy*, vol. iii. p. 380) will be of especial service to the student of the Old Testament. The evidence of the monuments is given in full wherever it elucidates a Biblical passage, and the various historical questions that incidentally arise are discussed at sufficient length. The paragraph on 2 Chr. xxxiv. 11-14

may be particularly recommended. The glossary at the end of the volume will be found useful, and the chronologist will be grateful for the appendix, in which all that we possess at present of the Assyrian canon is given in full. The arguments urged against Dr. Oppert's theory of a break of forty-seven years in the canon leave nothing to be added. Perhaps it would have been better had the author deferred annotating the book of Genesis until we have a more perfect acquaintance with the bilingual tablets and the proto-Chaldaean legends. Some of his combinations in this part of the work are certainly not right. Thus, whatever may be the explanation of *Shinar*, it cannot be compared with *mat curra*, "the land of the east" (like *im curra*, "the east wind," or *mat martu*, "land of the west"), which almost always is preceded by *khar-sak*, "mountain" (as in *W. A. I.* ii. 19, 2, 45), in contradistinction to "the plain" of the Bible, while *mat* (*ma + da*) is "country," never "city." I am glad to find that Dr. Schrader has independently come to the opinion that the Biblical compiler in 2 Kings xviii. xix. has confused together two distinct invasions of Judaea, one by Sargon, circa B.C. 710, and one by Sennacherib, in 701. Indeed, this is rendered certain by the reference (xviii. 34, xix. 13) to Samaria, Hamath, and Arpad, the conquest of which was due to Sargon. Isaiah x. belongs, I believe, to the campaign of the latter king (see verses 9, 11); in this way we may explain the representation of the Assyrian expedition as coming from the north-east instead of from Lachish on the south-west. The ideal picture which the prophet has been supposed to be drawing scarcely suits one who was speaking to contemporaries in the midst of a national crisis. Possibly chapter xxii. also refers to the same period, but it may relate to the earlier attack upon Gaza after the capture of Samaria by Sargon. But this, with much else, we may expect to be cleared up by further acquaintance with the inscriptions; and Dr. Schrader deserves thanks for breaking ground in this department of study, and setting the results hitherto obtained before the general reader.

A. H. SAYCE.

A. Eberhard's *Fabulae Romanenses*. Vol. I. : Syntipas et Vitae Aesopi. Lipsiae : Teubner.

THE first volume of M. Eberhard's edition of what he calls *Fabulae Romanenses*—containing a reprint (with critical apparatus) of the previously known text of the mediaeval tale of Syntipas (*i.e.* the Greek version of the well-known tale of the *Seven Wise Masters*, for the English versions of which see F. J. Furnivall's work on *Captain Cox, his Ballads and Books*, Ballad Society, 1871, p. lvii, sq.), with an earlier text of the same now first edited, and a collection of the amusing Lives of Aesopus composed in the middle ages—will no doubt be welcome to every lover of this kind of literature, and may, we hope, contribute to increase the number of the readers of these attractive compositions. The earlier version of Syntipas, now first published by M. Eberhard, is not quite complete, but much superior to the later text in point of style. But precisely on account of its corrupt diction and macaronic mixture of ancient and modern Greek, we prefer the version in which we first became acquainted with the tale, and which we then knew only in Boissonade's pretty, but now scarce, edition—Paris, 1828. In the earlier version we have met with very few passages still in want of correction; we may, however, mention p. 151, 25, where ηρέιτο should no doubt be changed into γέρειτο. In the later version we would suggest, p. 7, 17, ἐλκούτας instead of ἐλκούτες of the MSS. and ἐλκόντων of M. Eberhard; p. 9, 5, ἦν οὐ τὸ δρυοῦ . . . ἐκπληρώσης, instead of ἐκπληρώσεις, which does not suit the grammatical habit of the writer;

cf. p. 36, 15; p. 59, 13, and especially p. 134, 12, where the editor seems to have become aware of this peculiar use of the subjunctive—though somewhat late—at the end of his work. We would here observe (without censuring the editor too severely for this shortcoming) that we can frequently trace his own progress in the course of his work, and watch his familiarity with the diction and style of his author increasing with almost every sheet. This causes in parts the semblance of haste, but does not on the whole injure the solid character of the book. The editor observes on p. 14, 23, “πῶς, i. e. ὡς. Corais Στροχ. αὐτοσχ. ante Aelianum 48 n. 2”; but this grammatical note ought to have been made on the very first page, l. 13 (διήγησις . . πῶς τὴν . . διαβολὴν κατεσκένασεν ἡ μητριὰ αὐτοῦ). Boissonade's learned notes might occasionally have been turned to better use: e.g. on p. 2, 13, Boissonade properly observes (p. 172 of his ed.) the novel use of χρόνος as “year,” which is there very conspicuous on account of the preceding ἔτη; but M. Eberhard passes it over, and not before p. 91, 15, do we find a brief note on this peculiarity. (See also p. xi.) On p. 23, 20, ἄνω καὶ κάτω συστρέψας, the editor observes, “ἄνω καὶ κάτω quoquoversus e sermone uol-gari desuntum uidetur”; but why does he not simply quote Plato, *Theaet.* 153 D, τὸ λεγόμενον (i.e. the proverbial expression) ἄνω κάτω πάντα, “all is topsy-turvy,” for which Plato also says, ἄνω καὶ κάτω, and which occurs more than once in Attic writers (e.g. Eur. *Bacch.* 752), as the dictionaries may easily show? Beck in his index says, “formulam ἄνω τε καὶ κάτω invenies etiam *Suppl.* 689, *Bacch.* 740 et 752. *Herc.* F. 953, et *Pirith.* fr. vii. 3, et sine copula ἄνω κάτω, *Iph.* T. 282, *Bacch.* 349 et 602, *Herc. F.* 1307 et *El.* 802”; in the same way compare Meineke's index, p. 587, of his first edition of *Menander and Philemon*. Last of all, Coraës (whom M. Eberhard delights in quoting) mentions the popular use of ἄνω κάτω in his commentary on Isocrates, p. 179. See also Krüger's *Grammar*, § 59, 1, 2. We may also compare the Latin *sursum deorsum*, Ter. *Eun.* 278. It would thus appear that even the well-known use of the Latin *videtur* is rather out of place when speaking of a phrase so thoroughly Greek in all periods as ἄνω (καὶ) κάτω. Again, p. 54, 12, οὐδαμῶς γὰρ δύναμαι ἀνθυμηθῆναι, we have ἐνθυμεῖσθαι in the modern sense, “to remember,” though the editor passes it *sicco pede*. In the same way we imagine that the peculiar use of ἀκμὴν οὐκ ἔχόταν, p. 92, 20, would have been worth a note, confirming as it does Coraës' derivation of the modern ἀκόμη (or ἀκόμι), Πρόδρ. Ἐλλ. Βιβλ. μῆ: cf. also Lobeck on *Phrynicus*, p. 123. We should also have thought παρηράξεθαι, p. 130, 16, deserving of a note: see Coraës on Isocrates, p. 122. We might point out other passages in which a note would have been of use, and for which space might easily have been gained by omitting such trivial observations as those on ἀγαπῶσι and other common peculiarities of modern Greek, for which it would have been much wiser to quote Mullach's excellent *Grammar of Vulgar Greek* than to refer to the rare editions of Coraës' books; and likewise numerous readings, which are really of no importance at all, and occur again and again in all late Greek MSS., might have been omitted. But to return to our text, we would further suggest, p. 15, 2, ἀκοντισθεῖσαν (cf. p. 30, 7); p. 34, 26, perhaps τὴν γυναικείαν μορφὴν καρτερήσω, “I will bear a woman's shape;” p. 35, 13, we should certainly read ἔξουκωμένη (cf. ἔγγαστρωμένος, l. 19), or, if the correct form should be preferred, ἔξωκωμένης; p. 39, 23, perhaps δὲ ἀντήρησις μου, as ABV have μοι; p. 55, 24, probably ἀπέρχομένων; p. 63, 17, τι ἀλλο seems to be quite correct (the sense is “I shall not dare to give the king a different account [from what his son will no doubt tell him]”); p. 83, 21, doubtless δῆλος instead of ὡς ABV, ἔγω Eberhard; 86, 14, certainly συνωδίας; 105, 5, σμέζον would be a better

accentuation; p. 114, 7, certainly ὅτιτερ (cf. 120, 7; 141, 15); p. 95, 11, M. Eberhard is right in keeping μηνῶσι of the MSS. in preference to Boissonade's conjecture, μηνίσσου, as the analogous form μηνᾶ occurs in Florios, v. 921 (in my *Med. Greek Texts*). The diction of this work offers many interesting peculiarities: e.g. the words πολύξενος = πολυμῆχανος, 100, 12; λουτράριος or λουτράρης, p. 37, which is then replaced by the classic βαλανεύς, 38, 2. In the same manner ποτράρης, 115, 21, sq.

The first *Vita Aesopi* has justly been joined to *Syntipas* by the editor, the general character of both compositions being quite identical, and one and the same story even occurring in both. The diction is here as good as may be fairly expected in the thirteenth century, though sometimes we meet with strange expressions; e.g. the late word πρόσδοπος, 243, 7 (which is not given in Sophocles' *Dictionary of Byzantine Greek*). P. 232, 10, we fancy that we discern a disguised iambic sentence:—

ἀγαθῶν δὲ πλῆρες ἀπίδων τό γ' εὖ ποιεῖν.

We shall be glad to see M. Eberhard's second volume; and hope that his “Index,” to which he refers more than once in the present volume, will contain many such accurate and learned observations as we should expect from the editor of the *Philologos*.

W. WAGNER.

Intelligence.

The last number of Messrs. Teubner's *Mittheilungen* contains an elaborate article, by L. Müller, on Quicherat's edition of Nonius, which was also recently reviewed in our columns. From L. Müller's showing it appears that the new edition is by no means “up to the mark,” and that very little has been done in it towards settling the numerous questions unfortunately connected with this most foolish of all Latin grammarians, who, however, happens also to be the most important of all in his bearing upon earlier Latin literature and language. We shall be glad to see L. Müller's new edition. Generally speaking, modesty is not the fault of M. Müller, but in the present instance we are fully prepared to accept his statements as corresponding to truth. We are also pleased to learn that his long meditated edition of Lucilius is about to be issued.

The same number of the *Mittheilungen* contains articles on a forthcoming edition of Galenus' work, *De Hippocratis et Platonis Placitis*, by Iwan Müller, of Erlangen; a new critical edition of Euripides' *Medea*, by R. Prinz, in which trustworthy collations of the MSS. will be given for the first time; and on an edition of Juvenal with German notes, by Dr. Weidner. We hope that Mr. Mayor's excellent edition will not remain neglected by Dr. Weidner, though the fact that he overlooked Professor Conington's edition in his commentary on part of the *Aeneid* does not speak highly for his acquaintance with English publications. An etymological dictionary of the Latin language, by Dr. Alois Vaníček, is likewise advertised.

The seventh volume of August Böckh's Minor Writings (containing his critical articles) has just been published. This edition is now complete, with the exception of the fourth volume, which is promised to follow shortly.

The first part of the second volume of the *Acta Societatis Philologae Lipsiensis*, edited by F. Ritschl, contains *Lectiones Slobcenses*, by O. Hense; excellent *Quaestiones Onomatologicæ*, by O. Sievers; a somewhat lengthy and pretentious, but satisfactory, treatise, *De Actorum in Fabulis Terentianis numero et distributione*, by C. Steffen; and *Quaestiones Eratosthenicae*, by L. Mendelssohn.

We understand that a new and revised edition of Mr. Paley's *Properties* is about to be published shortly.

Dr. W. Wagner has had the offer of becoming the successor of Professor Dr. Koch at Eisenach, whose death we announced in our last number. Dr. Wagner has, however, decided to stay at Hamburg at present.

The death of Sig. Felice Fenzi, at the early age of 25, has robbed Italy of one of her most promising Orientalists. His work on Assyrian antiquities is highly praised by Ewald in a recent number of the *Göttingische gelehrte Anzeigen*.

M. G. Derenbourg's long-expected edition of the *Opuscula* of Ibn Jannach is announced by Geiger as in the press; that of Saadia's version of the Pentateuch seems to be postponed for the present.

Contents of the Journals.

Journal of the Royal Asiatic Society, vol. vi. part i.—I. The Ishmaelites, and the Arabic Tribes who conquered their Country ; by A. Sprenger. [Contests the view of those who consider the Ishmaelites as the ancestors of the Northern Arabians ; see *Academy* of July 1 (vol. iii. p. 258).]—II. A Brief Account of Four Arabic Works on the History and Geography of Arabia ; by Captain S. B. Miles. [Analysis of four works, manuscripts of which have been discovered, which throw much new light on the history and geography of ancient Arabia, especially the Himyar dynasty of Yemen ; viz. the *Iklil fi Ansab* of Hassan bin Ahmed el-Hamdani; the *Kitab el-Jezireh* of the same author ; the *Tarikh el-Mostabsir* of Ibn el-Mojawir ; and the *Kurrat el-Oyin* of El-Dubbi.]—III. On the Methods of Disposing of the Dead at Lassa in Tibet ; by C. Horne. [The paper is founded on a narrative supplied by a Llama of Lassa. The principal modes described are, exposure to the vultures ; cutting the corpse into pieces and feeding the dogs with it ; also salting and burning. The statements of classical writers are generally confirmed by this account.]—IV. The *Brihat-Sanhita* ; or, Complete System of Natural Astrology, of Varâha-mihira. Translated from the Sanskrit into English by H. Kern. [Continued from chapter xxxvi. to chapter li.] V. Notes on Hwen Thsang's Account of the Principalities of Tokhâristân, in which some previous Geographical Identifications are reconsidered ; by Colonel H. Yule. [Traces the Chinese pilgrim's wanderings from Samarkand to Kapîca, and the return route from Hupián to Yarkand, and proposes a number of new identifications, differently from Vivien de St.-Martin and Cunningham. The *li* in which the pilgrim's estimates are given is not considered to be a scientific road-measure, the expression "one hundred *li*" expressing "one day's journey," the distance varying according to the nature of the ground traversed.]—VI. The Campaign of Aelius Gallus in Arabia ; by A. Sprenger. [Examines the accounts given of Arabia in Juba's *De Expeditione Arabica*, and by Strabo, and proposes a number of identifications ; see *Academy* of July 1 (vol. iii. p. 258).]—VII. An Account of Jerusalem, translated from the Persian text of Nâsir ibn Khusrû's *Safarnâmah*, by the late Major A. R. Fuller. [The author was a native of Merv, who visited the Holy Land and Egypt in the eleventh century of our era. He states that he entered Jerusalem on the 5th of Ramazân 438 A.H. There occurs in his narrative a brief description of the Holy Temple. Of the original text of this work, two MSS. exist in England, one of which is in the British Museum, the other belonging to the Nawab Ziaud-din Khân.]—VIII. The Poetry of Mohamed Rabadan, of Arragon ; by the Right Hon. Lord Stanley of Alderley. [The concluding portion of the Morisco poet Mohamed Rabadan's *History of the Prophets*.]—Annual Report on the Progress of Oriental Research during the Past Year, and the State of the Society. Read on June 3 last.

Jüdische Zeitschrift (Geiger), vol. x. No. 3.—David ben Sakkai against Saadias. [A fragment of a Karaite document.]—Benedetti's *Giuda Levita*, Chénery's *Alcharizi*, and Baer's *Genesis and Isaiah* ; reviewed.—Miscellaneous : Frankel on the Targum to the Prophets. [An industrious collection of details, without new results, or recognition of Geiger's researches.]—The Arabic Original of the *Choboth ha-lebaboth* of Bachja.—Extracts from letters.

New Publications.

- ACTA SOCIETATIS PHILOLOGAE LIPSIENSIS. Ed. F. Ritschelius. Tom. II. Fasc. I. Leipzig : Teubner.
- ARISTOTELES Politik. 1.—3. Buch. Mit erklär. Zusätzen ins Deutsche übertragen v. J. Bernays. Berlin : Besser.
- BEAMES, J. A Comparative Grammar of the Modern Aryan Languages of India. Vol. I : On Sounds. Trübner.
- BEKKER, J. Homerische Blätter. Bonn : Marcus.
- BOECKH'S Gesammelte kleine Schriften. 7. Bd. Leipzig : Teubner.
- CASSEL, P. Esmun. Eine archäologische Untersuchung aus der Geschichte Kenaans u. s. w. Gotha : Schlössmann.
- CHILDERS, R. C. A Pali-English Dictionary. Part I. Trübner.
- CICERO'S Rede für T. Annius Milo. Mit Einl. u. Comm. v. E. Osenbrüggen. Hamburg : Mauke.
- DIETRICH, F. De Sanchoniathonis Nomine. Additis Inscriptionum aliquot Citrenium Lectionibus. Marburg : Elwert.
- DIEZ, F. Grammatik der romanischen Sprachen. 3. Theil. 3. neu bearbeitete und vermehrte Auflage. Bonn : Weber.
- ERATOSTHENIS Carminum Reliquiae. Dispositus et explicavit E. Hiller. Leipzig : Teubner.
- GUBERNATIS, Angelo de. Mythical Zoology ; or, The Legends of Animals. Trübner.
- JAHN, O. Sophoclis Electra in usum scholl. Ed. altera cur. ab Ad. Michaelis. Libri Laurentiani specimen photolith. aucta. Bonn : Marcus.

- KAMIL, The, of El-Mubarrad. Ed. W. Wright. Part IX. Leipzig : Brockhaus' Sort.
- KITÂB AL-FIHRIST. Band 2, die Anmerkungen u. Indices enthaltend. Leipzig : Vogel.
- KOCH, H. De Articulo Homeric. Leipzig : Hinrichs.
- LEGGE, J. The Chinese Classics. Vol. V. Part I. Trübner.
- MAEHLY, J. Das xxx. Idyll d. Theokrit. Berlin : Ebeling u. Phahn.
- MAHÂBHÂSHYAM, with the Commentary called Bhâshyapradipa, and a new Commentary by Pandit Rajarama. Trübner.
- SACUNTALA CÂLIDÂSI. In usum scholarum : textum recensionis Devanagaricæ recognovit atq. gloss. sanskritico et practico instruxit C. Burkhard. Breslau : Kern.
- SCHMIDT, J. Die Verwandtschaftsverhältnisse der indogerm. Sprachen. Weimar : Böhla.
- TRUMPP, E. Grammar of the Sindhi Language. Trübner.
- WHITNEY, W. D. Oriental and Linguistic Studies. Trübner.
- WROBEL, J. De Generis, Numeri, Casuum Anacoluthia apud Tragicos Graecos. (Abhandlungen zur Grammatik, Lexikographie u. Literatur der alten Sprachen. 3. Heft.) Berlin : Ebeling u. Phahn.
- ZAHN, v. Ueber die akustische Analyse der Vocalklänge. Leipzig : Hinrichs.

ERRATA IN NO. 59.

In page 411, col. 2, the word "Vaucheria" has been printed "Vancheria."

POSTSCRIPT.

Dr. Brockhaus, the eminent Orientalist, has been appointed Rector of the High School at Leipzig. His inaugural address was on the bearing and importance of Oriental studies.

The eminent mathematician, Alfred Klebsch, has just died at Göttingen, at the early age of 40.

(From the *Athenaeum*.)

MR. VLADIMIR DAHL.

Again we have to announce the death of a distinguished Russian writer. It has too often happened that a literary career in Russia has been prematurely closed in the grave ; and within the last twelve months three of the most useful of Russian scholars, Afanasiéf, Hilferding, and Pekarsky, have died in middle age. But Vladimir Ivanovich Dahl, whose death we have now to record, had attained a good old age, and so was able, before he was called away, to see his work brought to a full and happy conclusion. Born in 1802, of Scandinavian extraction, Vladimir Dahl was educated in the Naval Cadets' Institution at St. Petersburg, and he afterwards served on board the Black Sea fleet. At a later period he held a commission in the Russian army, and served in the Polish campaign of 1831. Having studied medicine at Dorpat, he filled a medical post in one of the Government hospitals at St. Petersburg, and finally he obtained an appointment in the Civil Service. But it was as a student of its popular literature that he made himself most useful to Russia. So diligent was he as a collector of Russian folk-lore that he was in possession of above 4,000 popular tales, besides more than 30,000 proverbs. The latter he published in a separate volume ; the former he liberally communicated to other scholars, and many of them now enrich the great collection edited by Afanasiéf. As an author he gained a considerable reputation by various works, such as the stories he published under the pseudonym of the "Cossack Lugansky." But his great work—that which will render his name truly immortal—is the invaluable *Dictionary of the Living Russian Tongue*, in four large volumes, which was completed in 1866. It is impossible to praise too highly this magnificent work—one to which he devoted, during a great part of his lifetime, what was most truly a labour of love. For the present, it is sufficient to say that to all who wish to study the popular literature of Russia it is an absolute necessity. Without its aid the songs and stories of the Russian people will offer difficulties trying even to a native, to a foreigner insurmountable.

For some time before his death Mr. Dahl suffered much from illness, but he retained to the last his interest in the work he had so long loved. When the writer of this brief notice last saw him, he was, although in evidently ailing health, full of intellectual vigour and enthusiasm. Surrounded by his books, in a home which was more like a country-house than a city residence (it stood in the outskirts of Moscow, near the Zoological Gardens, and was said to be the only building in that quarter of the city which had survived the famous conflagration of 1812), he spent the declining years of his life in tranquillity, having the satisfaction of seeing his literary harvest safely garnered and fully appreciated.

W. R. S. R.

THE ACADEMY.

"INTER SILVAS ACADEMI QUARRERE VERUM."

Vol. III.—No. 61.

Readers are reminded that the mention of New Books, Articles, &c., in our lists is intended as a guarantee of their importance. The Editor of THE ACADEMY cannot undertake to return communications which are not asked for. The Editor cannot reply to questions from authors respecting the notice of their books. The next number will be published on Monday, December 16, and Advertisements should be sent in by December 11.

General Literature.

Shelley's Early Life; from Original Sources. With Curious Incidents, Letters, and Writings, now first published or collected. By Denis Florence Mac Carthy, M.R.I.A. Hotten.

THE main object of this volume is to set forth the facts of Shelley's life, as connected with his journey in 1812 to Ireland, where he advocated Catholic emancipation, and more especially repeal of the Union. Mr. Mac Carthy made this subject his own many years ago; and whatever has been said since then by other writers, with some approach to detail or accuracy, has been due very principally to him. He has now carried the investigation much further, enlarged upon the facts, rectified a number of small or less small errors, and shown with some completeness the true bearings of this episode in an illustrious life.

The volume consists of two classes of subject-matter—one which is proper to Mr. Mac Carthy himself, and the other to Shelley. The latter consists of Shelley's various political pamphlets: the *Address to the People of Ireland*, the *Proposals for an Association of Philanthropists* for the benefit of Ireland, the *Declaration of Rights*, the *Proposal for putting Reform to the Vote throughout the Country*, and the *Address to the People on the Death of the Princess Charlotte*. The last two do not exactly belong to Mr. Mac Carthy's theme; but all Shelleyan students will be obliged to him for having added them, and so made the collection of Shelley's strictly political pamphlets complete. They are all rare, if we except the *Declaration of Rights*, which, having been re-published in the *Fortnightly Review* by the present writer in 1871, has become accessible to all readers. The Address concerning Princess Charlotte had also been reprinted, and is less scarce than the others, which very few people had ever seen, and which were practically unattainable. By far the best of these is the Reform pamphlet, written in 1817, when Shelley was about twenty-five years of age. The two Irish pamphlets, written in 1812, are tedious and inflated productions, though it cannot be said that they are devoid of sound advice, while, for generosity of spirit and high-souled scorn of oppression, they are naturally conspicuous. The earlier of the two effusions, the *Address*, full of lumbering repetitions, was purposely written down to the capacity of the uninformed classes of Irish people: if it hereby gains in clumsiness, at least it loses somewhat in bombast; but the *Proposals for an Association of Philanthropists* make up for all arrears in this direction. There are two other pamphlets by Shelley which ought to be rescued from oblivion; but, not being of a political character, they could hardly, under any circumstances, have found a place in Mr. Mac Carthy's book. The first of these is the *Refutation of Deism*, pub-

VOL. III.—NO. 61.

lished in 1814: Mr. Mac Carthy seems to suppose that no copy of this dialogue is now known to be extant, but there is at least one, in the possession of Sir Percy Shelley. Its precise object (I am told by a gentleman who has looked into it) is to show that there is no tenable medium between Atheism and Christianity, coupled with an ironical championing of the latter. The second of the two tractates referred to is the *Essay on Devils*, never yet published, but existing in manuscript, or perhaps even in print.

The reprint of Shelley's pamphlets in Mr. Mac Carthy's volume occupies 98 pages out of 408. The remaining 310 pages have as their nucleus one fact, which is indeed the chief contribution to Shelley's biography furnished by this book—viz. that the poet, while still at Oxford in 1811, published in London a poem termed *A Poetical Essay on the Existing State of Things*, "sold by B. Crosby and Co., and all other Booksellers." It was advertised as "By a Gentleman of the University of Oxford" (the same phrase as in the title-page to Shelley's novel of *St. Irvyne*), "for assisting to maintain in prison Mr. Peter Finnerty, imprisoned for a libel": its price was two shillings. An advertisement to the foregoing effect appeared in the *Oxford University and City Herald* of 9th March 1811. The evidence that the poem thus advertised was by Shelley is merely inferential, but may nevertheless be regarded as sufficient. It is simply this: that the Dublin *Weekly Messenger* of 7th March 1812, at which time Shelley was in Dublin, contained an article about him, written in all probability by the well-known political agitator John Lawless, wherein occurs the following passage: "Mr. Shelly, commiserating the sufferings of our distinguished countryman Mr. Finerty, whose exertions in the cause of political freedom he much admired, wrote a very beautiful poem, the profits of which, we understand, from undoubted authority, Mr. Shelly remitted to Mr. Finerty: we have heard they amounted to nearly an hundred pounds." Mr. Mac Carthy fairly argues that, as Shelley sent to Godwin this number of the *Weekly Messenger* without in any way controverting the statement which it contained affecting himself, he practically confirmed its truth. Our author therefore made zealous research for anything to explain or verify the allegation in the Dublin paper. At last he traced out the advertisement above referred to in the *Oxford Herald*, and putting the two things together, he comes to the firm and, I think, the safe conclusion that the writer of the *Poetical Essay on the Existing State of Things* was Shelley. Of the poem itself, however, Mr. Mac Carthy has not, after extensive and reiterated enquiry, succeeded in obtaining the least vestige. He tells us who Mr. Finnerty was—an Irish printer and press writer and reporter, who, after suffering the pillory and imprisonment as printer of *The Press* newspaper in Dublin, endured another incarceration of eighteen months in Lincoln Gaol for an alleged libel on Lord Castlereagh. He was undergoing this sentence at the time that Shelley came forward on his behalf: and he died on the 11th of May 1822, only a couple of months before the author of the *Poetical Essay* and of many other less perishable verses.

Mr. Mac Carthy is entitled to the whole credit of ferreting out the *Poetical Essay*, and identifying it with Shelley as author: but he goes a little too far in assuming, as he appears to do throughout his book (and especially on p. 4), that no hint had ever before been given of the publication by Shelley of any poem to which this volume is found to correspond. In the memoir of Shelley (p. xli) which I published in an edition of his works at the beginning of 1870, there is a note which says: "Everything that is known on this subject [the volume named *Original Poetry by Victor and Cazire*, printed in 1810] is due solely to Mr. Garnett:

see his article in *Macmillan's Magazine*, June 1860, *Shelley in Pall Mall*. He has kindly informed me, moreover, that a gentleman connected with the Shelley family says that Percy 'wrote and printed another book of verse about the same time. He could not remember the title, but thought a copy might still be in existence.' This "other book of verse" must, to all appearance, be the *Poetical Essay*; for even the unwearying and minute researches of Mr. Mac Carthy regarding this period of Shelley's life have not brought to light anything else to which the statement could be supposed to apply.

Next to this of the *Poetical Essay*, the most important point brought out in the volume before us is that Shelley's Oxford friend, Mr. Thomas Jefferson Hogg, so far forgot himself as to make love to Harriett Shelley (late Miss H. Westbrook) very soon indeed after being first introduced to her, and consequently very soon after Percy and Harriett had become man and wife; and that this discreditable escapade, which occurred in York in October 1811, caused a total estrangement between Shelley and Hogg for about a year ensuing. Mr. Mac Carthy, it is true, does not state this matter in absolutely plain and unmistakable terms: he does not give the name of Mr. Hogg at the decisive moment (p. 300), but only refers to "one of the earliest chosen and the most boastful of the number" of Shelley's friends. However, putting together this passage and various others in the volume, there can be no mistake as to what Mr. Mac Carthy means. Moreover, I am aware that what he thus intimates is based upon very explicit statements in letters written at the time by Shelley, which I had myself read through before completing my memoir of the poet; and Mr. Mac Carthy best knows what chance he would have had of tracing them out through his own unaided endeavours. The many extracts which he gives from letters addressed by Shelley, and occasionally by Harriett, to Miss Hitchener, and which form perhaps the most valuable and entertaining portion of the present volume, all come from this correspondence. The revelation now made by Mr. Mac Carthy concerning a friend who "attempted to seduce my wife" (to cite the precise expression in Shelley's letter to Miss Hitchener) may explain to the reader of my memoir of Shelley what was meant by a passage, purposely reticent, in a note (p. lxxv): "I have good reason to know that, at an earlier period of his wedded life, his disrespect for the marriage tie was by no means such as to make him tolerant of conduct which he regarded as an interference with its obligations in his own and Harriett's case." Again, the explanation which Mr. Mac Carthy offers (p. 117) of Shelley's Wertherian prose fragment, connecting it with this same affair of Hogg and Harriett, amounts simply to the suggestion which my memoir contains (p. clxxiv): "In this year [1813], or perhaps earlier, he commenced a sort of variation of Göthe's *Werther*, from which Hogg gives an extract. An accomplished Shelleyite has suggested to me that this excerpt (a letter purporting to be written to Werther by the husband of Charlotte) may be less merely Wertherian, and more directly personal to Shelley himself, than Hogg allows the reader to infer. Without adopting this view of the matter, I recognise it as admissible: if it is correct, the fragment probably belongs to the end of 1811, or beginning of 1812." A word should here be added as to the question of Mr. Hogg's real culpability in this matter of love-making to Harriett. As before stated, it is most certain that Shelley charged him with attempting to seduce her, and also with inciting the poet himself to fight a duel, and so salve the wounded honour of both parties: but we are not obliged, nor indeed allowed, to take Shelley's conception of the facts, in all instances, as a true picture of them. Shelley

apparently knew nothing of the affair save what Harriett told him, eked out perhaps by not over-friendly confirmatory hints from her sister: he does not seem to have come to any personal explanation on the subject with Hogg, but only to have interchanged letters with him about it: and it is extremely conceivable that Hogg, as soon as he perceived Shelley to be grave or warm on this delicate topic, turned bantering and elusive. If we suppose—what is abundantly probable—that the inexperienced school-girl Harriett exaggerated a little in narrating to Shelley the passages of a flirtation got up by the cynical young man from the University, and—what is practically certain—that Shelley's imagination was not behindhand in making a blaze out of such suitable fuel supplied to it by Harriett, we shall conclude that "attempted seduction" of the latter is not proved against Hogg—although it is difficult to doubt that his conduct was rightly open to animadversion and suspicion.

Two other interesting points which Mr. Mac Carthy has been the first to elicit relate to Shelley's Oxford career. He has found that the pamphlet which led to his expulsion from the University, *The Necessity of Atheism*, was announced for publication and sale—not merely, as had hitherto been supposed, circulated in a semi-private way by himself. The following advertisement appeared in the *Oxford University and City Herald* of 9th February 1811: "Speedily will be published, to be had of the Booksellers of London and Oxford, *The Necessity of Atheism*. 'Quod clara et perspicua demonstratione caveat pro vero habere mens omnino nequit humanae.'—*Bacon de Augment. Scient.*" [It is obvious here that "caveat" and "humanae" are misprints for "careat" and "humana": whether the misprints occur in the advertisement itself, or in Mr. Mac Carthy's reproduction of it, I am unable to say.] Further, Mr. Mac Carthy has found that, about the time of Shelley's stay at the University, and not beyond that time, six pieces of verse, original and translated, appeared in this same paper, *The Oxford Herald*, some of them signed "S." and others "Versificator," and he surmises that these may be by Shelley. He extracts these effusions, and rather strongly pronounces for the Shelleyan authorship of the one original specimen, named *Ode to the Death of Summer*: a conclusion as to which I should take leave to dissent from Mr. Mac Carthy, as the poem does not appear to me to resemble, in any marked degree, those which Shelley had composed up to that date, and still less the immortal products of his maturer years.

Partly perhaps on account of the affair with Harriett Shelley, already referred to, Mr. Mac Carthy exhibits a great dislike of Mr. Hogg, and a total contempt of his *Life of Shelley* as an authority: nor, indeed, has there been any time, since the date of the publication of that most diverting book, when its gross inaccuracy in detail, and its recklessly overcharged portrayal of facts, could be matter of uncertainty. Mr. Mac Carthy is especially severe on the slighting account which Hogg gave of the whole of Shelley's Irish expedition, including the statement that the poet was howled down 'y Roman Catholics at a public meeting when he urged on their consideration the rightful claims of Protestants. In all this matter Mr. Mac Carthy corrects many details, and elucidates many more, some of them of substantial interest: but, on the other hand, he seems himself a little too much inclined—accepting as he does the various statements favourable to Shelley's oratorical efforts in Dublin, and to his Catholic auditors—to ignore all allegations that tell in the opposite direction, even though these may not involve any real contradiction of the other assertions, but only supplement and modify them. Sometimes the author's antipathy to Mr. Hogg makes him positively unjust to that writer, whose permanent and deep regard for Shelley ought not to

be called in question, whatever may have been the misdemeanours of his youth, or the partly sarcastic (as well as partly enthusiastic) tone of his biography. Mr. Mac Carthy cites the expression of Hogg, "I cannot but confess that the poor fellow [Shelley] had many underhand ways"; and he adds, "The underhand ways here referred to may perhaps mean those opinions on the character and conduct of Mr. Hogg himself which, though unpublished, still exist in the handwriting of Shelley." This is wholly gratuitous, and, were it not probably the result of oversight, must be called most unfair and malicious. The fact is that Hogg has no sooner spoken of Shelley's "underhand ways" than he explains his meaning thus: "I should add that his underhand ways differed in one very important respect from those of other people. The latter were concealed because they were mean, selfish, sordid,—too bad, in one word, to be told: *his* secrets, on the contrary, were hidden through modesty, delicacy, generosity, refinement of soul,—through a dislike to be praised and thanked for noble, disinterested, high-minded deeds, for incredible liberality and self-sacrifice." Thus we see that Mr. Hogg, under an ironical phrase, only paid a very high tribute to his friend's memory in this instance.

The same habit of picking one sentence out of a whole passage, and consequently mis-stating the result, has produced an erroneous charge by Mr. Mac Carthy in my own case. On pp. 338, 339, he refers to the statement of Captain Medwin that Shelley, having left Ireland for the Isle of Man, and sailing thence in November, took a principal part in saving the vessel from a storm. He points out the inconsistencies of this narrative, and then proceeds: "And yet this absurd story and these unfounded statements have been repeated with a sort of parrot-like iteration by every subsequent writer who has undertaken to give us an account of Shelley's life,—except, indeed, Mr. Hogg, who generally commits himself to no one's nonsense but his own. They are adopted without the slightest hesitation by Lady Shelley and Mr. Rossetti." Now, my memoir of Shelley (p. lxvi) speaks of the matter in the following terms: "They experienced a storm near the Isle of Man, when Shelley, in the judgment of the skipper, who would receive no payment from him, saved the ship and its crew of three by his energetic and judicious exertions." To this very passage is appended the ensuing note: "It is not quite clear when this incident happened. Medwin (*Life*, vol. i. p. 177) says it was in November, and after the *first* Dublin sojourn; in the *Shelley Papers* he says it was in 1813 or 1814. If it was really in 1813, it must have been in going to or returning from the *second* Dublin sojourn. It cannot have been in 1814, nor yet in the month of November. Perhaps the whole story is apocryphal." This is a strange specimen of "parrot-like iteration," and of "not the slightest hesitation." The citation of this passage, and of that from Mr. Hogg's book, may perhaps suggest to Mr. Mac Carthy a little more caution in pronouncing other people to be in the wrong: although, as I have already said, he has undoubtedly corrected several errors of detail appearing in preceding accounts of Shelley, mine included—for which I am heartily obliged to him.

The solution offered by Mr. Mac Carthy of the alleged attempted assassination of Shelley at Tanyrallt, in February 1813, appears to me altogether extravagant. He thinks that Miss Hitchener (the schoolmistress from Hurstpierpoint who had recently been an inmate of Shelley's house, and whom he had now parted from, and termed "The Brown Demon"), or Miss Hitchener's father, may have been at the bottom of it. The father, it seems, was a publican near Hurstpierpoint, who had in his earlier years been a smuggler,

and whose real surname was Yorke. Shelley engaged to make some pecuniary allowance to Miss Hitchener after she had left his house: but Mr. Mac Carthy *conjectures* that this promise may have remained unfulfilled, and that Miss Hitchener or her father, after expostulations and threats, may have prompted some one to undertake an illegal *coup de main*. Considering the distance between Hurstpierpoint and Tanyrallt, and all the other circumstances of the case, it appears to me that if we term Mr. Mac Carthy's solution of the mystery "not impossible," we treat it liberally. I may take this occasion to mention a fact not apparently known to writers about Miss Hitchener—that she too was a "poetess," though of rather a different class from Percy Bysshe Shelley. In 1822, Messrs. Black, Young, and Young of Covent Garden, published *The Weald of Sussex, a Poem by Miss E. Hitchener*. It has no literary value, though there is a certain display of erudition in the poem and its notes: it shows that by 1822 Miss Hitchener had ceased to profess herself, as in the early days when Shelley so fulsomely and fatuously adored her, a "deist and republican."

Mr. Mac Carthy's book is not very easy for consecutive reading, as there is a good deal of repetition in it, and some scattering of its constituent elements, and a tendency towards making the utmost of every minute point that it raises—and not many of the points are of major importance. It is, however, a laborious and a thoroughly genuine accession to the biographical materials regarding Shelley, and will remain indispensable to all students of this period of his life.

W. M. ROSSETTI.

RUSSIAN FUNERAL LITERATURE.

Laments of the Northern District. [*Pritchaniya Syevernago Kraja*.] Collected by E. V. Barsof. Vol. I. Moscow.

In the north-east of Russia, especially in the neighbourhood of Lake Onega, the collectors of popular songs and stories have of late years found very much that is interesting and valuable. Thence have been drawn, to a great extent, the ample materials which have rendered so rich the collections of "metrical romances" and other poems due to the patient toil of such explorers as Ruibnikof and Kireefsky. To the name of a third labourer in the same field, unfortunately, a mournful interest is now attached. Alexander Hilferding, the president of the ethnographical section of the Russian Geographical Society, was on the point of publishing the mass of popular poems which he had secured in that part of the country, when he started, a few months ago, to explore the district a second time. At Kargopol fever struck him down, and before many days had passed, he was laid in an untimely grave.

Of the poems which are current among the unlettered peasantry of this part of Russia, by no means the least interesting are the *pritchaniya*, or "lamentations," which are to be heard on the occasions of deaths, funerals, and festivals held in memory of the dead. Specimens of these have been given at various times, and in Ruibnikof's great work there occur, under the name of *zaplachki*, or "wailings," several of these dramatic dirges or keenings, remarkable for a singular kind of power as well as pathos. But no comparison can be made between any preceding collection of such poems and that for which we are now indebted to M. Barsof. His work is the first which has been entirely devoted to this branch of Russian popular poetry—one of which he has most satisfactorily proved the great importance.

Considerable time and space would be required to give anything like a clear idea of the merits of the poems which

fill 298 pages of this, the first, volume of M. Barsof's work. But it is possible to compress into a small compass some of the remarks which he makes in the excellent introduction which he has prefixed to them, and in the interesting account of funeral customs by which they are followed.

After mentioning some of the countries in which keenings and professional keeners have been and still are in vogue, M. Barsof proceeds to trace in the old chronicles the earliest record of their existence in Russia, proving, on the authority of Nestor, that *plachi*, or "laments," formed in Olga's time an indispensable part of the *trizna*, or "funeral feast," of the old Slavonians; showing how, when Oleg died, "all the people wailed over him with great lament," dwelling upon the "beautiful wail of Yaroslavna" in the celebrated poem, *On Igor's Expedition*, and quoting from the lives of the (Russian) saints and other ancient records several extracts from funeral poems composed many centuries ago, but differing little from the metrical complaints in which the borderers on Lake Onega at the present day express their feelings towards their dead. Then he shows how the church attempted to put a stop to the use of such funeral chants, on account of the heathen sentiments which they breathed, sometimes even branding them with the name of "satanic songs," objurgating them in sermons, and solemnly prohibiting them by the voice of the council held at Moscow in 1551. But neither the influence of the church nor even the power of Peter the Great was sufficient in this matter to bend the will of the people. Beside the bodies or above the graves of their dead relatives and friends the peasants insisted on indulging in their wonted expressions of grief; and so the old songs which had come down to them from the days of their ancestors continued to be sung in at least all the remoter parts of Russia. Of late years, however, they have lost much of their hold upon the affections of the people in general, and in order to hear them in perfection it is necessary to visit such outlying districts as those in which M. Barsof sought and found the materials for his work.

Much is to be learnt from these archaic poems with respect to the views of the old Slavonians about this life and that beyond the grave. In them Death is represented as a foe, who makes her appearance (*Smert = Mors* being feminine) in various guises. In vain does man attempt to struggle with her, and rescue from her grasp the beloved victim; at one time as a raven or a hawk, at another as a fair maiden or a crippled beggar, she glides into the doomed dwelling and cuts the thread of life. Vainly also is she beset by expostulations and tempted by promises; utterly inflexible she strikes the fatal blow. Sometimes, indeed, she (or Fate) is represented as enjoying the sufferings of her prey. As in all poems of this class, the action of dying is compared to the setting of the sun, the falling or disappearance of a star, the melting of snow, and the like. The actual moment of dissolution is held specially sacred, and it is the bounden duty of a relative or friend to watch beside "the painful couch," the "weary pillow," to keep guard while "the bright eyes are parting for ever with the white light," the soul is going forth from "the white breast." Bitterly do the wailers grieve over those corpses by which no watchers have sat at the last moment. The departing soul is sometimes described as a breath which is borne away by the winds, or, under the influence of Christian ideas, is received by one of the angelic host; sometimes it is pictured as a butterfly or a bird. The ideas expressed in the poems with reference to the existence of the disembodied spirits are of a twofold nature. Sometimes the soul is supposed to dwell in the grave, and so the carpenters who are constructing the coffin for a corpse are besought to make it a comfortable dwelling-place for its late tenant; at other times it is described as flying

together with other spirits among the clouds. But wherever their regular habitations may be, the souls of the dead are believed, and even expected, to appear to the living. Some traces may even be found, M. Barsof thinks, of a family *cultus* of the dead, and he quotes, as an instance, the lament which is sung by the dead man's kinsfolk, when they go through all the house and the outhouses which had belonged to him, as if expecting to find him in some part of his wonted home. So closely is the idea of the house-master connected with that of the Domovoy or house-spirit that, "if you say, 'I have seen the Master' (*Khozyain*), every *Zaonezhanin* (Beyond-Onega-Man) will think you mean that you have seen the Domovoy."

From these poems, says M. Barsof, an interesting picture of the hard life of the North might be constructed. In them may be seen, as in a mirror, the monotonous landscape, the gloomy forest, the dreary swamp, the scanty vegetation; in them also are portrayed the simple folk who have to maintain so constant a struggle with the forces of nature, their picturesque dress, their old-fashioned habits and customs. Of especial interest are the passages which refer to the family relations in the patriarchal mode of life which prevailed when their songs were originally sung, and which, in some respects, has not yet been materially altered. Each degree of relationship demands its own particular wail, and so we find special forms of lamentation, not only for parents and children, or brothers and sisters, but also for uncles, aunts, nephews, nieces, godchildren, first-cousins, first-cousins-once-removed, &c. Very interesting also are the poems which throw light upon the relations of the peasants with their communal authorities, or with the upper classes of officials and the clergy, of which nature are the laments for a *Starosta*, or village chief, or for a "pope," or a doctor, or for a *Mirovoi Posrednik*, or official arbiter. And no less interesting are the laments of a different kind, those devoted to persons who have been drowned, or struck by lightning, or who have committed suicide.

Over M. Barsof's most interesting account of the Olonets funeral customs we must now skim very hastily. Many of them are exceedingly remarkable, such as that of leaving openings, in which glass is sometimes set, in the coffin; that of placing in the coffin cuttings from the hair and the nails of the corpse, and also such things as bread, needles, and so forth; that of using as a remedy against ague the soap with which a dead body has been washed; that of (sometimes) singing wedding songs at the funerals of young girls, and many another of equal interest. His descriptions, also, of the funeral banquet and the memorial feast are most valuable, and so is the comparison he draws between the memorial festivals of the Olonets Slavonians and those (of a very similar nature) observed by the Ugrian Mordvins.

With an amusing description of the various *Voplenitsas*, or professional wailers, from whom he derived a great part of his valuable materials, and with "a North Russian glossary, together with general remarks on the language of the *Pritchaniya*," M. Barsof concludes the first volume of a work for the execution of which he deserves high praise, and which is of the greatest interest to every student of folk-poetry and of folk-lore.

W. R. S. RALSTON.

LITERARY NOTES.

Enigmas of Life, by W. R. Greg (Trübner and Co.), is a book which deserves some attention as showing in a convenient compass how much—or how little—can be done in the way of constructive speculation without a foundation of fixed scientific principles. Mr. Greg is a reformer who believes in the perfect-

ibility of the species, while taking a very gloomy view of its actual estate ; and a sceptic who cherishes some articles of faith which he knows to be uncertain. In his first essay, on "Realisable Ideals," he omits to explain whether by "possibilities" he means logical and mechanical, or what may be called historical, possibilities ; and as the latter only can (and certainly will) be realised, his optimistic inferences lose a part of their weight.—Essays II. and III., "Malthus Notwithstanding," and "Non-Survival of the Fittest," discuss two aspects of the population difficulty, and in the interests of the moral and physical perfection of the race argue in favour of adjourning the theory and practice of Malthusianism until the whole of the habitable globe is evenly peopled with scientific farmers.—Essays IV. and V., "On the Limits and Direction of Human Development," and "The Significance of Life," suggest the doubtfulness of everything except the existence of good, which is treated more as an axiom than as an hypothesis, though the surrounding atmosphere is so sceptical as to warrant the assumption that the writer would not assert more than his own power of imagining a world which he himself would think excellent.—"De Profundis" and "Elsewhere" carry this subdued optimism a little farther, and develop the assumptions, which an interesting preface aims at justifying, of the existence of a Creator and a Future Life. Mr. Greg writes for those who look upon both as doubtful, and merely asserts his own belief as a fact, claiming a right to hold it till the negative is proved. He is severe upon the unphilosophic materialism of the Christian doctrine of the resurrection of the body, though it is certainly not from modern science that he acquired the counter conception of a life "elsewhere" for disembodied spirits. His argument is that human bodies are known to decay, and that their elements pass into fresh combinations, so that at the Last Day there might be thousands of claimants for a single particle of matter. But a materialist finds it least impossible to conceive the resurrection of an individual consciousness by supposing all the old material conditions of its activity to be somehow or other re-united, and, given a Providence, surely it might be trusted to arrange that no two men should die in the possession of the very same fragment of flesh. The theory of transmigration is a *via media* which would allow the contending souls to re-occupy their bodies in turn. It would be unfair to complain of vagueness in the conclusions of a book which begins with the admission ". . . enigmas which, at thirty, I fancied I might be able to solve I find, at sixty, I must be satisfied simply to propound." But asking riddles is endless work unless it is first agreed in which language (faith, reason, or sense) the answer is to be given.—The volume contains an unusual number of printer's errors.

M. Émile Montégut's "Impressions de Voyages et d'Art" (*Revue des deux Mondes*, November 1) continue as readable as ever. At Citeaux the tourist learnt to understand the feud between the *gamay* and the *pinot*, the latter a vine growing on sunny slopes and producing the true *vin de Bourgogne*, the former a common "hypocritical" plant which ruins the fame of the nobler growth. The head of a reformatory for boys on the site of the old monastery assured him that the Parisian *gamins* were the most docile and corrigible. Beaune reminded him of Piron's satirical *Voyage à Beaune*, and Auxerre, which has erected a statue to Davoust, of several unpublished anecdotes which go to prove the marshal to have been more amiable than his reputation.

The *Cornhill* (December 1) contains a very happy appreciation of Nathaniel Hawthorne and the influence of his nationality on his genius. A suggested comparison with Charlotte Brontë illustrates the distance between his weird or airy fancies and the language of real passion or the delineation of intelligible character. A paper in the same number, on "Coincidences and Superstitions," borrows from the history of science some very curious instances of the former.

A new poem is announced by Julius Grosse (well known by *Das Mädchen von Capri* and other poems) under the title *Abul Kasim's Seelenwanderung*. It is supposed to be the narrative of a dervish, who describes his experiences in previous states of existence. The metre is that of Dante.

Art and Archaeology.

Grimm's Life of Raphael. [*Das Leben Raphaels von Urbino.* [Italiänischer Text von Vasari. Uebersetzung und Commentar von Herman Grimm. Erster Theil.] Berlin : Dümmler.

HERMAN GRIMM'S contribution to Raphaelesque literature is an instalment of a larger work. It comprises Vasari's life of Raphael, turned, we know not why, into modern Italian by Professor Tobler, and the same text conveniently divided into chapters, reprinted in Italic fragments and commented at considerable length. Grimm's purpose seems to be, at some future period, to write a biography of Raphael for which these commentaries shall be a book of reference, enabling him to dispense with notes and tell his story without further interruption. His views and arguments will, he doubtless thinks, have been exhaustively put, and the reader will thus take the benefit of a continuous narrative which—we may surely predict—will have more than the usual attractions of Grimm's manner.

The questions which prominently arise as we read this first volume of commentary are important. Does Grimm exhaust the materials, artistic and literary, at his command, and does he make such use of them as will preclude the necessity of commenting his own commentary?

None who peruse this work with a previous knowledge of the subject will deny the vast reading, the comprehensive grasp of sources, and the subtlety with which conclusions are drawn. It is striking with what clearness problems of perplexing intricacy are treated ; and it may be admitted that there is a natural plausibility even in the solutions from which we feel bound to dissent.

Nothing appears more interesting, in our opinion, than the short but telling essays in which Grimm, with the help of engravings and photographs, sketches the gradual transformation of Raphael's compositions, from their first imperfect conception to their final completion. We note in the course of these excursions a judicious and close criticism enlivened and adorned by sparkling lightness of style.

Guided by a casual observation of the Abbé du Bos which escaped earlier research, Grimm is enabled to name almost all the figures in the "School of Athens"; and it is probable that he might have gone further had he not been restrained by considerations which have since been ably combated by Scherer.* Sidonius Apollinaris and Marsilio Ficino's *Plato* are the true and only sources from which Raphael's literary friends derived the subject of the "School of Athens"; and it will be difficult for future writers to contend that this vast and noble composition contains a single figure connecting the philosophers of Greece with the apostles and fathers of the Christian faith. We think, indeed, that here it will be necessary for Grimm to surrender his position as a trimmer between two different schools and to assert a decided and final opinion of his own.

There is much again that commands attention in the parallel, frequently drawn, between Raphael and the heroes of the Tuscan schools of his time, Leonardo, Fra Bartolomeo, and Michael Angelo ; for though here and there something might be brought forward to modify his views and bring his thoughts into a different channel, his opinions might be maintained with very little further expansion or modification.

On one or two questions of moment, it may be necessary to express the belief that Grimm will not be precluded from the necessity of making concessions, and we may be deliberately compelled to assert that it is impossible for a

* W. Scherer's *Über Raphael's Schule von Athen* (22 pages, Vienna, 1872) has an important complement to this volume of Grimm's commentaries.

student of Raphael to accept the assumption, ably though it be argued, that Raphael did not visit Florence before 1506.

No doubt it is proper and necessary to contest the accuracy of Vasari when he relates the causes of Raphael's first journey to Florence, and the manner in which he was led to make it; but it is quite another thing to deny that the journey took place. As early as the middle of the fifteenth century the most intimate connection existed between the painters of Perugia and those of Florence. There was not an artist of mark in the first who was not perfectly informed of the commissions entrusted to craftsmen of the second. There was no road better known than the road from Perugia to Florence, which had been frequently travelled by Domenico Veneziano and Fra Filippo Lippi. It had been hinted to Perugino on the very threshold of his career that Florence was the only city in which an artist could rise to fame; and he had been to Florence, where he caused his name to be respected. At the very time of which we are treating he had been induced to revisit the Tuscan capital, where Michael Angelo's "David" lay finished and waiting for a pedestal. Da Vinci, too, had returned to Florence from Milan, and had partially completed the noble cartoon which was copied at a later period by so many students. What more probable than that the causes which induced Perugino to leave Perugia should lead Raphael, his pupil, to quit Sienna?

Vasari says that, when Perugino went to Florence, Raphael left Perugia for Città di Castello, where he painted three pictures, including the Dudley "Crucifixion" and the "Sposalizio" of the Brera. He then proceeded to Sienna, and took service with Pinturicchio, for whom he executed certain drawings. His connection with Pinturicchio was broken off because he had heard of the completion of cartoons by Leonardo and Michael Angelo. It is quite as natural to suppose that Vasari was ill informed of the causes which led Raphael to Florence as it is to conceive that Raphael painted the pictures of Città di Castello at Perugia. We can easily prove that da Vinci's "Battle of Anghiari" was not finished till 1506; and Grimm gives good, though not absolutely convincing, reasons for concluding that Michael Angelo did not allow his cartoon to be seen till 1508. But putting this aside, there may have been reason enough for Raphael's desire to visit Florence, if we only suppose him cognisant of Perugino's presence there. He might have learnt from Perugino himself that Leonardo was composing his grand subject for the public palace; and he might expect facilities for seeing the masterpiece in its unfinished state from a man who was da Vinci's friend, and had been his companion in Verrocchio's shop. He had doubtless heard—as who had not?—of the commotion caused by the question how the "David" of Michael Angelo should be moved from its place in the sculptor's studio to where it was in future to be exhibited, for this was a question which had occupied the mind of every one in Florence; and it is notorious that it led to a general congress of artists in the early part of 1504. Why, then, should he not have gone to Florence?

Perugino was at Florence in 1504. He was there with slight interruptions till 1506. It was then that Leonardo gave up to him the commission which he had accepted from the brethren of the Santissima Annunziata de' Servi to complete the "Crucifixion" unfinished at the death of Filippino. Is there any reason to doubt that Raphael might have been in Florence in 1505, when we know that his predella of the "Madonna of Sant' Antonio" (1505) comprised an improved version of the very group of the Virgin and her succouring women which was introduced by Perugino into the "Crucifixion" of the Servi? But this is not all the evidence

which may be adduced to strengthen the belief that Raphael was at Florence in 1505.

It is an error of Grimm to suppose that Raphael furnished the designs for the frescoes executed by Pinturicchio and his assistants in the library at Sienna as early as 1502. There is testimony to prove that the ceiling of the library, in which Raphael had no share, was begun and completed by September of 1503; that the work was suspended on account of the death of Pius III., and resumed at the close of 1504. In 1504, no doubt, Raphael was with Pinturicchio at Sienna, for the names of both painters are connected with one of the most curious incidents which illustrated the public life of those days at Sienna. Julius II. had put Sienna under interdict, and Pandolfo Petrucci dared to deride the pope's authority. A chapel, recently founded in San Francesco of Sienna, had been completed at the expense of the Piccolomini; it was adorned with a Nativity by Pinturicchio, resting on a predella by Raphael. The time was the beginning of November, when all the wealthy citizens had left their summer residences and settled in town for the winter; but the churches were closed; the bells no longer called the faithful to prayer, and an Oriental stillness lay upon the streets and towers. Pandolfo ordered the canons of St. Francis to celebrate the mass at the altar of the Piccolomini; and, on their refusal, he drove the priests by force to the altar. It was probably after the memory of this incident had begun to fade from the minds of the Siennese that Raphael made for Pinturicchio the designs with which he now began to decorate the Piccolomini library. But then Raphael was free to go to Florence; and to Florence we may believe he went; for there is not a single picture of all those which he executed in 1505 which does not prove that he had seen the works of Masaccio, Leonardo, and Fra Bartolommeo.

It is quite in vain that Grimm denies this influence in the "Madonna" of Sant' Antonio, which is not, as he believes, at the Louvre, but in the National Gallery; and it is impossible to disagree with Waagen when he maintains that the free attitudes, the natural breadth of extremities, and the bold sweep of draperies in the foreground figures of St. Peter and St. Paul as conclusively reveal the lessons derived from Fra Bartolommeo as the female saints, Catharine and Rosalia, display the working upon Raphael of Leonardo's style.

Equally vain is the effort to deny the presence of Florentine elements in the wonderfully clear tones and admirably rounded flesh of the principal figures in the Ansidei "Madonna" at Blenheim.

Grimm says he cannot conceive how the "Madonna del Gran Duca" can be registered amongst the pieces which Raphael produced before the Ansidei "Madonna." We may not be able to understand how Grimm can be blind to the Florentine breadth and treatment in the fresco of San Severo; and there may be reasons which it is needless here to state why this splendid work should not be classed amongst Raphael's creations of 1505.

There are minor questions involved in the difference as to the true period of Raphael's first journey to Florence which Grimm naturally seeks to determine in his own favour; but here his endeavours are more of a negative than of a positive kind; and it is clear that, if he should be led to abandon his present theory respecting Raphael's movements from 1502 to 1506, he would have to alter these minor questions to some extent also. Whether he do this or not may be left to Grimm's choice. It is enough for the present purpose to have stated the grounds which exist for rejecting his theory.

One or two points more require but passing observation. Grimm accepts as a genuine Raphael the "Christ on the Mount" of the Maitland collection, which is now acknowledged to be by Spagna. He casually gives expression to

an opinion which is liable to be controverted, that the "Madonna" of Sant' Onofrio at Rome is by Leonardo da Vinci.

J. A. CROWE.

ART NOTES.

The death of Théophile Gautier is a loss not only to Letters but to Art. For many years he contributed to the journals notices of the Salons, and a great variety of essays on artistic subjects. An article treating of his activity in this department is to appear shortly in the *Gazette des Beaux-Arts*. The *Chronique des Arts*, from which we quote, tells us that he was born at Tarbes, April 30, 1811. He came early to Paris, where he received his education in the Collège Charlemagne, after which he entered the atelier of M. Rioult, but, disgusted with the ill-success of his first attempts, he gave himself up to poetry, in which he achieved so brilliant a reputation.

M. Guédéonoff, the director of the Imperial Hermitage, has now printed the paper on the marble group attributed to Raphael, read by him on August 22 to the Academy of Sciences at St. Petersburg. The text is accompanied by two photographs, one from the work in question, the other from the plaster cast by Cavaceppi, existing at Dresden. The subject of the group is the well-known composition by Raphael of a Dead Child borne by a Dolphin (see *Academy*, vol. iii. p. 408). A repetition in marble, which was held for a long while to be the original work, was exhibited at Manchester in 1857, and pronounced by W. Bürger to be of no great beauty. This is smaller than the Dresden cast, and does not show signs of certain injuries which are proved by the cast to have existed in the original. It is not possible within the present limits to give full value to the facts and arguments which go to support the claim of the Hermitage example to priority and authenticity. Suffice it to say that it tallies exactly with the Dresden cast, which was formerly in the collection of Baron Mengs; that every probability is in favour of its having been the work restored and cast by Cavaceppi at Rome in 1768, when it was in the possession of M. de Breteuil; that between 1768 and 1779 it passed into the hands of a certain Mr. Browne (see Dallaway's *Anecdotes of the Arts in England*), who sold his collection of ancient marbles to an agent of the Empress Catherine II. It will be seen that there is a gap of 250 years to be filled up; that we are in nowise in a position to prove that the Hermitage example is the work which the Count Castiglione proposed to buy of Giulio Romano on May 8, 1523. Cavaceppi, in his catalogue of the works cast and restored by him, remarks of this group that it is by Lorenzotto, after a sketch by Raphael. It yet remains to be shown whether much or any credit should be attached to this hypothesis, or whether Raphael did much, or little, or nothing, towards the carrying out of his project.

We learn from the supplement to the *Zeitschrift für bildende Kunst* (October 25) that Signor Rosa's excavations in the Roman Forum have been crowned with the most brilliant success. About the beginning of September a portion of a Roman bas-relief was found at the corner where rises a middle-age tower. At two different portions of this tower (to which they appear to have served as supports hidden by other material) are now disclosed a row of portions of wall occupying from 12 to 15 metres, decked on both sides with costly sculptures, which have apparently served for the decoration of the rostrum. These marble reliefs would display to the eyes of the people standing below a historically arranged series of notable events having relation to the Forum. The position in which they have been found opens a fresh field to topographical conjecture and enquiry, whilst the reliefs are of the greatest importance, not only an account of their historical content, but on account of the brilliant quality of their execution, which appears to belong to the last bright epoch of Greek art in Rome. It is proposed to send the reliefs to the Vienna exhibition.

Amongst more recent publications in this department, the following appear to be worthy of special notice:—*La Colonne Trajane d'après le surmoulage exécuté à Rome 61-62*; this work will be complete in 120 parts, 12 of which have been

already published; the text is by M. Froehner, the conservator of the Louvre, and is embellished by numerous vignettes; the plates, 220 in number, are printed in colour from photographs executed by Gustave Arosa.—*Kunstmythologischer Atlas*, by Professor Overbeck; the atlas is to accompany the Professor's *Griechische Kunstmystologie*, of which the first volume, "Zeus," appeared last year; it possesses claims to attention rarely united, for it is not only valuable from a scientific but from an artistic point of view. A liberal subvention from the Saxon government has enabled the Professor to present his work to the public in its present form. The gigantic size of the plates (3 feet by 2 feet) will, we fear, stand very much in the way of frequent and convenient use.—*Rom und Mittel-Italien* (2 vols.), *Ober-Italien* (1-vol.), by Dr. Gsell-Fels. These are not mere handbooks, but the outcome of zealous and scientific research. They are amply illustrated with plans and maps, and every portion of the text bears traces of individual study.—*Tresor de l'Abbaye de Saint-Maurice d'Agaune*; both the text and illustrations are by M. Édouard Aubert. This Swiss monastery has preserved its treasures intact. M. de Blavignac published a few of the works of art which it contains in his *Histoire de l'Architecture sacrée dans les anciens évêchés de Genève, &c.* The present magnificent work is accompanied by an atlas of 45 plates, engravings or chromolithographs, which reproduce their originals with the greatest exactitude.—*I Pittori di Foligno nel secolo d'oro delle arti italiane*; it is sufficient to say that this book comes from the pen of Professor Adamo Rossi, the great authority on the Umbrian school.

In the *Allgemeine Zeitung* of November 6, under the title of "Der Maierhof und der Augsburger Rathsherr Philipp Hainhofer," will be found a very characteristic picture of the career of one of those artists who flourished from the end of the fifteenth up to the middle of the last century—artists who devoted their best energies to the designing of those objects which are best described by the expressive German word *Kleinkunst*. Hainhofer was born 1578 at Augsburg. There he settled and established his Kunstkammer, which was visited by princes. Amongst his correspondents he counted Henri IV. and the Markgraf Friedrich of Baden. The Maierhof was a costly toy executed for Duke Philipp of Pomerania, on which worked joiners, goldsmiths, watchmakers, stonecutters, modellers, engravers, &c. The design was by Hainhofer, and was intended to depict the life of the nobles, military affairs, and peasant life. The quantity of small objects required to carry out this elaborate piece of child's play was enormous, and its completion occupied five years, at the end of which Hainhofer sets out with it himself to Stettin, accompanied by Baumgartner, who had executed the joiner's work required. At Stettin, Hainhofer, already a rich man, was loaded with gifts, was named "herzoglicher Rath," and dismissed with letters of recommendation to the Bishops of Würzburg and Bamberg. The author of this curious sketch, Franz Trautmann, cannot refrain from drawing attention to the resemblance with a difference which exists between the story of Hainhofer's journey to Stettin and Dürer's journey to the Netherlands. Dürer came home a loser, and for all his noble work got from the Governess Margaret nothing; but the wealthy Hainhofer with his vain toy kindles the delight of princes, and obtains riches and honours.

A. von Zahn concludes in the present number of the *Zeitschrift für bildende Kunst* his notice on Barock, Roccoco, and Zopf. Dr. Kinkel reviews Dr. Gsell-Fels Handbooks for Italy. The number contains also a notice of the loan exhibition of ancient objects of industrial art now being held at Berlin, and a notice on the Vienna treasure chamber.

Very various articles are to be seen at the loan exhibition in Berlin mentioned above. The Crown Prince is said to have been active in getting together objects of interest; amongst many, all of which are worthy of notice, may be specially mentioned a fine Italian bronze bust of Sixtus V. which the Prince discovered in the picture gallery at Sanssouci. It is reported to be a masterpiece, and in its forcible expression of natural power forms a remarkable contrast to the delicate spiritualised head of Innocent X. which belongs to Prince Carl, and has been placed in the same room.

The collections in the museums of Paris are gradually assuming their wonted look. The MSS. have returned to the library of the Rue de Richelieu, the armour to the Museum of St. Thomas d'Aquin, the precious goldsmith's work of the Musée des Souverains has found its way back to the glass-cases of Apollo Gallery. The bronze chair of Dagobert has been returned, together with the gold ornaments from the tomb of Tournay, to the Cabinet de Médailles. But the chalice of Saint-Rémi, which was taken from the cabinet by means of a formal order of the Empress, has not been restored. The library since '96 has possessed this chalice without the library (says the *Chronique des Arts*) ; the chalice would have been melted at the Mint. The directors were careful, when forced to part with it, to make a memorandum in writing that they did so only as a loan : it is now the duty of the French government to see that the ecclesiastics of Rheims make a just restitution.

MM. Colnaghi and Co. have recently published a set of seven etchings by Mr. J. C. Robinson, the former director of the Art Department at South Kensington, whose forced retirement from a position in which his controlling knowledge was so much needed has been and still is so much regretted. Very few will be prepared to find what a high position as an artist must be assigned to the author of these seven plates. The subjects are very various ; some of the Spanish ones are perhaps the most remarkable where all is good. "Space and Light" is simply one of the most brilliant things of the kind that has ever been done.

The "Kitchen Interior," by Pieter Aartsens, commonly called Lange Pier, was one of the pictures which attracted most attention at the recent exhibition organized at Amsterdam by the society Arti et Amicitiae. The proud force of this robust and magnificent master was a revelation to the foreign public. We learn that the Brussels Museum has had the good fortune to secure this fine specimen of his work.

The Society of Arts at Lyons will open its annual exhibition on the 10th January 1873, and will close it on or about the 15th March.

MM. Corot and Diaz have been named knights of the order of Leopold, on the occasion of the general Exhibition of the Fine Arts which has just taken place at Brussels.

New Publications.

GUBERNATIS, Angelo de. Zoological Mythology ; or, The Legends of Animals. 2 vols. Trübner.

GARRUCCI, R. Storia dell' Arte cristiana nei primi otto secoli. Venezia : Münster.

Physical Science.

A Treatise on the Theory of Friction. By J. H. Jellett, B.D. ; Senior Fellow of Trinity College, Dublin. Dublin : Hodges, Foster, and Co.

FOR the experimental determination of the laws of friction between solids, we are mainly indebted to Coulomb. The investigations, also, of M. Morin into the nature and action of this force are of great value. The laws established by them, although only approximations to the truth, have been adopted by mathematicians as the basis of the analytical treatment of the equilibrium and motion of particles and bodies on rough surfaces. The most important of these laws is that of the proportionality of the friction to the pressure. With reference to this law the author states in his preface that "the adoption of a more complicated law would have greatly enhanced the mathematical difficulties of the theory, yet without giving results mathematically coincident with facts." Undoubtedly a more complicated law would have immensely increased the mathematical difficulties, and would probably render any but the most

simple problems insoluble ; but it is not clear that the results obtained would fail in coincidence with facts. The theory, however, has so far received but little attention ; and the space allotted to its development in most treatises on Rational Mechanics (a designation of the mathematical science used by Mr. Jellett) is extremely limited in comparison with that devoted to the solution of mechanical problems on the supposition of perfect smoothness. The consequence has been to cause many students to look upon friction as a force which, to a certain extent, lies without the province of Rational Mechanics, but which has to be taken into consideration whenever it is required to apply results obtained on the supposition of smoothness to practical questions. This neglect, moreover, probably causes a large number of students to regard Rational Mechanics as a matter of pure analysis, and to lose sight of the physical truths which the formulae represent. The author wishes by this treatise to establish the theory of friction in its proper place as a branch of Rational Mechanics, and to obtain for it a more ample discussion than has yet been given it. The work, which well supports the reputation of its learned author as a mathematician, is one well calculated to effect this, both from its logical and scientific arrangement and from the thoroughness with which the theory has been worked out. The treatise is divided into eight chapters, which coincide with the principal divisions of the subject.

In chapter i. are discussed the general principles of the theory—such as the differences between moving and resisting forces, the nature and laws of the force of friction, the differences between statical and dynamical friction. The conception of the cone of resistance, which seems to be due to the late Canon Moseley, and of which considerable use is made throughout the treatise, is clearly stated, and directly deduced from the fundamental law of the proportionality of the friction to the pressure.

Chapters ii. and iii. are devoted to the analysis of the equilibrium of particles and bodies on rough surfaces. In these chapters the great importance of the cone of resistance is fully appreciated, and the light which its employment throws on the causes of the indeterminateness of problems involving friction, as well as on the limiting positions of equilibrium, is most perfect. In the several sections of these chapters numerous examples are worked out which cannot fail to be of great assistance in enabling the student to obtain complete mastery of the general propositions.

Chapters iv. and v. contain the analysis of the motion of particles and bodies on rough surfaces. Here the reader will immediately perceive the effect on the problem of one of the principal distinctions between statical and dynamical friction, viz. that whereas statical friction at any point of a body in contact with a rough surface is equal and opposite to the resultant of all the other forces acting on the body at that point, the dynamical is along the direction of motion of the point, but opposed to the motion, and its magnitude attains the maximum value—that of the pressure multiplied by the dynamical coefficient of friction.

Section 2 of chapter v. relates to the initial motion of a solid body resting on one or more surfaces ; and in example 1 we come across the seeming paradox of the possibility of a motion of pure rolling of a cylinder placed with its axis horizontal on a rough vertical plane. For the explanation of this apparent paradox, the reader is referred to the book itself.

Chapter vi. relates to the distinction between possible and necessary equilibrium ; and it is shown, by the consideration of the differences between statical and dynamical friction (one of which has just been mentioned, and the other is that the coefficient of the former is greater than that of the latter),

that there are certain positions of a system in which equilibrium *may* exist, and others in which it *must* exist. The formula which gives these positions is—

$$\Sigma m(X\delta x + Y\delta y + Z\delta s) = \text{or} < 0,$$

where X, Y, Z represent the components of all the forces, external, geometrical, and frictional ; the other letters and symbols have the ordinary signification. Now X, Y, Z may have such values for the position of rest as to satisfy this condition, whilst the friction is statical ; whereas they may cease to satisfy it when the friction has become dynamical by a small motion given to the system. In this case the equilibrium is *possible*, but not *necessary*. If, however, X, Y, Z be such that this condition holds when the friction is dynamical, the position is one of *necessary* equilibrium ; inasmuch as any small motion will cause the friction to take its dynamical value, for which the condition holds, and the motion will consequently be immediately destroyed. This chapter is certainly one of the most important, and at the same time the most interesting, in the book, from the clearness with which the differences between statical and dynamical friction are pointed out, and from the able manner in which the effects of these differences are developed.

Chapter vii. treats of the actual value of the acting force of friction, and of the cause of the indeterminateness of the mathematical solution, which lies in the abstraction introduced into the investigation. This abstraction Mr. Jellett considers to be the supposition of the perfect rigidity of the bodies and surfaces. The want of rigidity calls into action forces of elasticity, which produce slight oscillations, a discussion of which will lead to a completely determinate solution. This is illustrated by an example of a heavy body placed on a rough plane inclined to the horizon at an angle (α) greater than the angle of friction, and supported by a string. Only one equation can be obtained for the determination of the tension (T) and the friction (F), viz. $T + F = Mg \sin \alpha$. On taking into consideration, however, the slight extensibility of the string, and the small oscillations which the body will describe when its weight stretches the string, an equation is obtained for determining the tension, and, therefore, the friction can be fully determined.

In chapter viii. are discussed the interesting problems of the Top, Friction-wheels, and Locomotives.

The book is a really valuable addition to the literature of Rational Mechanics, and cannot fail to be of great service to the mathematical student. The general discussion of the force and its effects occupies a considerable space, and is so well developed as to be, to a great extent, available to those students who have not time or mathematical attainments sufficient to enable them to work through the whole of the mathematics. The book is most admirably printed, the diagrams are extremely well done, and the number of misprints observed were few and unimportant.

W. J. LEWIS.

Notes of Scientific Work.

Geology.

On the Quaternary Formation in the Neighbourhood of Dresden.—In a paper bearing the above title, and recently published at Halle, Dr. C. A. Jentzsch discusses—(1) the extent of the sea during that epoch ; (2) the diluvial hills ; (3) the Dresden heath ; (4) the siliceous deposits of the valley of the Elbe near Dresden ; and (5) of the loess. After critically treating the more important of the many theories respecting the nature and origin of loess, the author propounds his own views on the origin of that of the Elbe valley. At one period the Elbe flowed high above its present course, excavating its river-bed gradually, and at the same time underwent lateral dislocations, chiefly due to its smaller tributaries. The river then moved towards the right side, partly, the author thinks, on account of the tributaries, partly on account of the loose sands forming its banks. As the river worked its

way through the sand on its right side, the Elbe formed siliceous deposits on its left bank, which lay nearly horizontal in consequence of the river having deepened its bed only very slowly. High floods then occurred as they do at the present time. It is probable, however, considering the different climate of the quaternary epoch, and more especially the influence of larger masses of ice, that they exerted a greater disturbing effect than they do now. These floods, extending far inland, swept into the river large quantities of the land-snails which inhabited its banks then ; and the mud, containing numerous land Mollusca, was then deposited on the left banks of the Elbe. (6) Local formations : the marl of Cotta near Dresden, and the freshwater limestone of Robschütz in the Tribisch valley, near Meissen. (7) The fauna of these beds : in the freshwater limestone were found skulls of man, and bones of other portions of the human body, as well as rude pottery, proving the contemporary existence of man with *Elephas primigenius* and *Rhinoceros tichorhinus*, the remains of which abound. In addition to these, remains of the following Mammalia were discovered in the same deposit :—*Plecotus auritus*, L., *Crocidura leucodon*, *Erinaceus europaeus*, *Mustela martes*, *Mus rutilus*, *Sus scrofa*, *Equis Caballus*, *Cervus elaphus*, *C. capreolus* ; of Birds, *Ciconia alba*, Bechst. ; and of Reptilia, *Tropidonotus natrix* and *Bufo cinereus* ; and a numerous and rich fauna of freshwater shells.

Tin Ore in Australia.—According to Mr. F. T. Gregory's report presented to the Geographical Society of London at the meeting held on the 6th November, the district in Queensland in which tin ore has been discovered is situated near the headwaters of the Severn river and its tributaries, and comprises an area of about 550 square miles. The district is an elevated granitic table-land intersected by ranges of hills rising abruptly, some attaining an elevation of about 3000 feet above the sea. The richest deposits are found in the beds of the streams or in alluvial flats on their banks ; the aggregate length of these bands is estimated at about 170 miles. Numerous small stanniferous lodes have been discovered, but only two of much importance, one near Ballandean Head station on the Severn, and another in a reef of red granite rising in the midst of metamorphic slates and sandstones. The lodes run in parallel lines bearing about N. 50° E. The ore, cassiterite, is invariably associated with red granite, the felspar being a pink or red orthoclase, and the mica generally black ; when crystals of tin ore are found *in situ*, however, the mica is white. The crystals of tin ore are generally found in or along the margins of quartz, threads, or veins in bands of loosely aggregated granitoid rock, but they are sometimes imbedded in the micaceous portions.—At the same meeting, G. H. F. Ulrich gave some description of the recent discoveries of tin ore in New England, New South Wales, a district almost immediately adjoining the tin region of Queensland. It forms a hilly elevated plateau, nearly 4000 feet above the sea-level. The predominant rocks are granite and basalt, enclosing subordinate areas of metamorphic slates and sandstones ; the basalt generally forms the highest crests, and is spread in extensive masses over the country. The granite of the tin district is similar to the Queensland granite, but carries white orthoclase, and is transversed by quartz veins containing cassiterite in fine druses, seams, and scattered crystals, and by dykes of a softer granite, consisting chiefly of mica, and with scarcely any quartz, in which cassiterite is distributed in crystals, nests, and bunches, as well as in irregular veins several inches in thickness.

On the Included Rock Fragments of the Cambridge Upper Greensand.—The occurrence of numerous subangular fragments in the Upper Greensand formation was so far remarkable that it had already attracted the notice of Mr. Bonney and Mr. Seeley, who had both briefly hinted at the agency of ice. Unaware of the suggestions of these gentlemen, Mr. W. Johnson Sollas and Mr. A. J. Jukes-Browne, in a paper read at the meeting of the Geological Society on the 6th November, have expressed themselves in favour of this view. The infallible indications of Upper Greensand origin consisted of incrustations of *Plicatula sigillum*, *Ostrea vesiculosa*, and coprolites, without which the boulders would be undistinguishable from those of the overlying drift. The following generalisations were propounded :—1. The stones are mostly subangular ; some consist of friable sandstones and shales, which could not have borne even a brief journey over the ocean-bed. 2. Many are of large size, especially when compared with the fine silt in which they were imbedded ; the stones and silt could not have been borne along by the same marine current. 3. The stones have various lithological characters, and may be referred to granitic, schistose, volcanic, and sedimentary rocks, probably of Silurian, Old Red Sandstone, and Carboniferous age. Such strata are not found *in situ* in the neighbourhood, and the blocks must have come from Scotland and Wales. Numerous arguments were adduced in favour of their Scotch origin. The above considerations, that numerous rock fragments, some of which are very friable, have been brought from various localities, and yet retain their angularity, were thought sufficient evidence of their transportation by ice ; the majority showed no ice scratches, but the small proportion of scratched stones in the moraine matter borne away on an iceberg and the small percentage of ice-scratched boulders in many deposits of glacial drift show that the absence of these striae is

not inconsistent with the glacial origin of the included fragments. The fauna, so far as it proved anything, suggested a cold climate; though abundant, the species were dwarfed, in striking contrast to those of the Greensand of southern England and the succeeding chalk. The authors concluded that a tongue of land separated the Upper Greensand sea into two basins, the northern of which received icebergs from the Scandinavian chain; the climate of this basin was cold, that of the southern basin being much warmer.

Notice on the Balaenoids of the Vienna Basin.—Up to the present time only five species of three genera have been found in the Tertiary basin of Vienna, and they have been derived partly from the marine, partly from the Sarmatian etage. These are: *Cetotherium priscum*, Eichw.; *C. ambiguum*, Brandt; *Cetotheriopsis linziana*, Brandt; *Pachyacanthus Suessii*, Brandt; *P. trachyspondylus*, Brandt. The genera *Cetotheriopsis* and *Pachyacanthus* are new. A paper by T. F. Brandt on this subject is printed in the *Sitzungsberichte der Akademie der Wissenschaften, Vienna*, p. 3.

The Tertiary Basin of the Lower Rhine.—The large Tertiary basin of the Lower Rhine consists of a central basin with a number of smaller inlets, which are known under the names of the Dürener, Bonner, Düsseldorf, and Siegburger bays. The deposits are chiefly sand and clay, with numerous lignite beds, all which yield a very abundant flora and fauna. The fauna, in addition to land animals and such as only live in freshwater basins, present an extraordinary number of insects which could only have lived in the forests and on the moors of the lignite period. They furnish a clear proof that during the Middle Oligocene period an extensive land and freshwater formation existed on the Lower Rhine, that had but a very slight elevation above the sea-level, and most probably resembled the present Hesse or the swamps of Florida. As regards the flora, 247 species are described in all, of which 120 have been met with elsewhere. (Dr. A. Gurlt, *Übersicht über das Tertiärbecken des Niederrheines*, Bonn.)

The Miocene of North Germany.—A. von Koenen describes in the first part of his paper on the Miocene fauna of North Germany, published in the *Schriften der Gesellschaft zur Beförderung der gesammten Naturwissenschaften zu Marburg*, the siphonostomous Gasteropods, in all 142 species of the following genera:—*Murex*, 7; *Trophon*, 1; *Tiphys*, 2; *Tritonium*, 5; *Turbinella*, 2; *Cancellaria*, 15; *Pyrula*, 1; *Spirilla*, 1; *Ficula*, 2; *Fusus*, 18; *Stenophthalmus*, 1; *Buccinopsis*, 1; *Terebra*, 7; *Eburna*, 1; *Nassa*, 12; *Phos*, 1; *Purpura*, 1; *Cassis*, 5; *Cassidaria*, 1; *Columbella*, 4; *Oliva*, 1; *Ancillaria*, 2; *Conus*, 3; *Pleurotoma*, 26; *Defrancia*, 4; *Mangelia*, 8; *Borsonia*, 1; *Mitra*, 2; *Voluta*, 2; *Cypraea*, 3; *Erato*, 1; *Marginella*, 1.—The number of newly created species is 16.

The Pliocene Formation of Tuscany.—According to Antonio d'Achiardi, the Pliocene formation of Tuscany consists of bluish clay, covered by fine sands, over which again lie coarse boulders. He believes the boulders, as well as the sands and the clay, to have been simultaneously deposited from the same ocean, though precipitated to different depths. (*Bullet. geolog.* 35.)

The last part of the *Jahrbuch für Mineralogie und Geologie* contains an interesting obituary notice of the well-known Alpine geologist, Arnold Escher von der Linth, who died recently at Zürich.

Physiology.

The Influence of the Length of a Nerve traversed by a Current of Electricity upon its Excitation.—V. Willy, in a paper published in *Pfleiderer's Archiv*, states that it is generally allowed that the degree of excitation of a nerve, measured by the extent of contraction of the muscle to which it is distributed, augments with the length of the segment of the nerve through which the current is transmitted after this is closed or before it is opened. According to the author's latest researches, however, this only holds good for the descending current through the nerve, whilst the converse obtains for the ascending current. He arrived at this result by two ways: first, by ascertaining the strength of current, which, when passed through various lengths of the extrapolar portion of the nerve, induced a minimum contraction; and, secondly, by determining the amount of contraction produced by equal excitations passed through extrapolar segments of nerve of various lengths.

The Metamorphosis of Tissue under the Influence of Morphia, Quinine, and Arsenic.—H. v. Boeck has published in the *Zeitschrift für Biologie* (vol. vii. part iv.) the results of his investigations of the action of the above-mentioned substances on a dog. The animal chosen for the purpose weighed 54 lbs., and during the experiment was daily fed with 500 grammes of good meat, containing 17 grammes of nitrogen and 150 grammes of fat, and 150 c.c. of water. In the first experiment morphia was used, and it was found that, when the excretion of nitrogen had remained unaltered for five days, the addition to the food of 1·5 grains of morphia per diem during those days caused a reduction in the amount of nitrogen to the extent of more than 10 grains (0·7 gramme) in that period. The second experiment was

made with quinine, and to the above-mentioned quantity of food one gramme (15·44 grains) of quinine was added per diem during three days, when it was found by daily analysis of the excreta that as much as 11·6 grammes (179 grains) less of nitrogen were excreted in eight days. This represented a certain though slight quantity of food and tissue spared by the use of the drug. The third experiment was with arsenic, of which altogether 2·5 grains were given in doses divided over three days. The results of analysis of the excreta again showed that only an inconsiderable amount of food and tissue were spared by the addition of this substance to the food.

On Endogenous Cell Formation.—The question of the endogenous formation of cells, says Professor Bizzozero, in a paper contributed to *Stricker's Jahrbücher* (part ii.), cannot be regarded as finally decided. Buhl thought he had set the matter at rest by his discovery of nucleated cell-containing cells in the exudate of croupous pneumonia, but Steudener and Volkmann have thrown a doubt upon Buhl's observations, by showing that some cells can be enveloped or invested by others by a kind of invagination process, and consequently that the presence of cells in the interior of others is not conclusive evidence that they were developed in that position. More recently Oser, from his examination of the fluid discharged in artificially produced purulent ophthalmia, has again given support to the doctrine of endogenous cell formation. Bizzozero has recently investigated the cells which accumulate in the anterior chamber of the eye under various morbid conditions, and which frequently contain cells in their interior. Many of the cells are large, irregularly rounded, and contain numerous fat cells in their substance, a nucleus, and several pus corpuscles. The latter, he considers, have been absorbed, and not produced in the position they occupy, for if that were their origin, they should be met with in all stages of development, which is not the case. Moreover, they should occur from the very commencement of the suppuration process, and this is not in accordance with observation, as they are only found when the pus has been for some days in the anterior chamber, and the cells have already lost their contractility. Then, again, blood-corpuscles are not unfrequently found in the large cells, as well as those of pus. Bizzozero has made a series of experiments on animals that support the following conclusions at which he had arrived from his observations on man: 1. That the pus corpuscles in the large cells have the aspect of old and degenerating elements. 2. That the cell-containing cells never appear in the early stages of the inflammation; and 3. That in suppurative inflammation of the anterior chamber of the eye large cell-elements are formed, which, owing to the contractility of their protoplasm, have the power of taking up the surrounding cells. He believes that these large elements proceed from an hypertrophy of the pus-cells, since intermediate forms can be seen, and, according to all observation, the epithelium of the membrane of Descemet does not participate in their formation. What becomes of the large cells after they have ingested all the white and red corpuscles and smaller pus-cells, he has not been able to ascertain.

The Action of Strychnia on the Vaso-Motor System.—In the second part of *Stricker's Medizinische Jahrbücher*, which has just appeared, S. Mayer, of Prague, gives the results of his investigations on the influence of strychnia on the vaso-motor system. He remarks that, though numerous researches have been devoted to the action of this poison, comparatively little is yet known respecting it, through the attention of observers having been exclusively given to its singular power of producing tetanic contraction of the vaso-motor system. Mayer's experiments were conducted on rabbits and dogs by means of an ordinary kymograph. The animals were injected with a solution of nitrate of strychnia in water (the solution containing 0·0008 of a grain in 1 c.c. of water), and being introduced into the jugular or crural vein. In one set of experiments the dogs were stupefied by opium, and artificial respiration was maintained through a canula introduced into the trachea. The manometer giving the tracings was connected with the carotid artery. A plate showing the tracings obtained in this and other cases accompanies the paper. About thirty seconds after the injection of 2 c.c. of the solution the arterial blood pressure was found to undergo an extraordinary increase with a simultaneous great increase in the frequency of the pulse. At the same time the voluntary muscular system became tetanised, the chest being maintained for a long period in a state of maximum inspiration. The great augmentation in the blood pressure was clearly due in part to the well-known mechanical action of the tetanised muscles on the current of venous blood, and partly to the obstacle which such contracted muscles present to the entrance of blood from the arterial side. Other accessory circumstances tending to the same result were the dilatation of the thorax and the accumulation of carbonic acid or the deficiency of oxygen in the blood, which last has been demonstrated to act as a stimulant upon the centres of innervation of the heart and blood-vessels. To eliminate some of these disturbing elements, some animals were subjected to the action of woorara before the injection of strychnia. By this means the effects of the muscular contraction were removed while the respiratory movements were not interfered with. Great elevation of the blood pressure was still observed however; the

number of the cardiac pulsations was not altered. Mayer concludes, then, that the increase in blood pressure following the injection of strychnia into the blood is essentially due to an extraordinarily intense excitation of the vaso-motor centres in the brain, and upon the resulting contraction induced in the small arteries. This view is supported by an examination of the intestines, which become exceedingly pale, as well as by the effects of section of the spiral cord, which severs the vaso-motor nerve, when all increase of blood pressure ceases.

A Certain Sign of Death.—Dr. Hugo Magnus, Assistant Physician to the Hospital at Breslau, suggests, as the best means of determining the presence of lingering traces of life, that a tight ligature be tied round one of the fingers. If life be not extinct, the part beyond the ligature soon becomes red, the depth of the colour increasing to dark red and violet. Just above the ligature the skin remains white. The explanation is sufficiently simple: the ligature prevents the return of venous blood from the part; but the arteries, being deeper seated and more protected, still continue to convey blood to the capillaries. The part of the finger beyond the ligature consequently becomes engorged. This test is of value because it can be applied without difficulty, and has the advantage of being the more available the sooner it is tried after actual death.

The Process of Coagulation.—The last part of *Pflüger's Archiv* (vol. vi. parts 8 and 9) is almost wholly taken up with a long paper by Alexander Schmidt, of Dorpat, on the coagulation of fibrin. He discusses successively the mode of obtaining and the characters of the fibrinoplastic substance or paraglobulin, and meets the objections raised by Brücke to its separate existence. It can be thrown down from its saturated alkaline solution by exact neutralisation with acetic acid, provided there is no other neutral alkaline salt present. It can also be precipitated by carbonic acid gas from the diluted serum of blood, chyle, lymph, and pus. It is insoluble in water, but highly soluble in neutral alkaline salts, and in very dilute acids and alkalies. The so-called fibrinogenous substance he obtains from the fluids of the serous cavities by diluting them with several times their volume of water, and precipitating with acetic acid. The presence of these two substances—the fibrinogenous and the fibrinoplastic substance—is a primary condition for coagulation, but in addition there must be, he maintains, a third substance, a ferment. This in the living body is not contained, either in the plasma or in the blood corpuscles, but first appears after the withdrawal of the blood from the body. It is not clear whether it is generated in the white corpuscles or in the plasma, but it is certain that it is not produced in the red corpuscles.

Botany.

Dr. Pfeiffer has issued a volume of a *Nomenclator botanicus*, which will contain in alphabetical order all the collective names, from sections to classes inclusive, which have been employed in systematic botany from the time of Linnaeus up to 1858, the date to which Dr. Pfeiffer brought his already published *Synonymia botanica*. The present work will really form a skeleton encyclopaedia of systematic botany. Each article will commence with the etymology of the name and the original authority for it, to be followed in chronological sequence by the different views that have been taken of its systematic position, including references to the works of all systematists by whom each particular view has been adopted. The articles will therefore be complete historical digests, the utility of which can only be estimated by those who have had occasion to prepare anything of the kind in connection with their own studies. The present work, when completed, will take its place beside such books as Steudel's *Nomenclator*, Pritzel's *Index Iconum* and *Thesaurus*, Walpers' *Repertorium* and *Annals*, as another of those indispensable aids to study which the laborious students of Germany have given to the botanical world. An especially important feature of the new work is that it includes Cryptogamic as well as Phanerogamic plants. No general view of the genera of the former exists later than that given by Endlicher eighteen years before, and it is often troublesome in consequence to run down a name in this branch of botany. Dr. Pfeiffer reasonably remarks that it was necessary to place some limit to his labours, and if one which is now fourteen years distant seems needlessly remote, he meets the objection by saying that he did not anticipate that it would have required so long a period of time to accomplish his task. It can hardly be doubted that, when the scientific history of our own day comes under review, the value of labours like those of Dr. Pfeiffer, in their influence on the progress of knowledge, will be estimated hardly, if at all, lower than that of actual scientific discovery.

Mimicry in Fungi.—In the *Gardener's Chronicle* for November 16, Mr. Worthington Smith records some very curious instances of "mimetic resemblances" among Fungi. *Agaricus atratus* is a very common and *Cantharellus carbonarius* a very uncommon fungus; the latter is always found in company with the former; and they are so exactly alike externally that it is impossible to distinguish them without gathering them and examining the gills. *Agaricus fascicularis* is one of our commonest fungi; two rare species have lately been added to

our flora, *Agaricus alnicola* and *Agaricus conissans*; they invariably grow with the former, and exactly mimic it in both habit and colour, although belonging to quite different subgenera with different-coloured gills and spores. *Agaricus carbonarius* and *Agaricus spumosus* have been found growing together, and so similar that it is impossible for the sharpest eye to distinguish one from the other without examination. One of our very commonest fungi is *Agaricus epipyterygius*; quite lately, in the midst of a bundle of this species, Mr. Smith found single specimens of *Hygrophorus meisneriensis*, a species new to this country, and so exactly resembling its commoner brother in slender stem, moist pileus, and peculiar colouring, as to be certain to escape detection unless minutely and carefully examined. These four instances of rare species of fungus possessing the exact habits and colours of very common species might easily be multiplied in number. The only benefit or "protection" which Mr. Smith can suggest to have accrued from this "mimicry" is that in consequence of it the rarer species have hitherto escaped detection and extermination by fungus-collectors!

Development of the Flower of the Hazel.—At the recent meeting at Bordeaux of the French Association for the Advancement of Science, M. Baillon, president of the Linnacan Society of France, read a paper containing some very curious observations on the development of the flower of the common hazel (*Corylus avellana*). At the time when the female flowers are generally considered to be expanded (in the neighbourhood of Paris, as of London, towards the end of January), they consist of nothing but a pair of long styles, crimson and stigmatic at their extremity, united at their base to a small extent in a mass which contains neither ovarian cavity nor ovules. These female flowers are to be first detected about the month of May or June, their development proceeding gradually until it reaches the stage described above about the following January. It is only after this period, which is considered that of flowering, that the depression which exists in the interior of the styles becomes developed into a pit more or less deep, representing a single ovarian cell. Still later, about the month of April, two placentae appear on the walls of this cavity, and in the interval of the branching styles, under the form of vertical slightly prominent bands. Soon the lower portion of these bands, larger and thicker, is divided by a vertical furrow into two lobes, each representing an ovule. The ovary of the hazel is at this time unilocular and quadriovular; but soon, at the same time that the two placentae become more prominent, the development of one or two, rarely three, ovules becomes arrested. The ovules, when they arrive at their full development, have become descending, with the micropyle directed upwards and outwards. By what means they are fertilised by the pollen from the male catkins, which fall in January or February, remains a mystery.

The *Nachrichten* of the Göttingen *Gesellschaft der Wissenschaften*, No. 24, contain a paper by Dr. A. Stern on a hitherto unnoticed letter of Spinoza, and the correspondence of Spinoza and Oldenburg in 1665. In v. Vloten's supplement there is a newly discovered letter of Oldenburg, the answer to which is missing. Dr. Stern thinks he has found a fragment of the latter in Robert Boyle's *Works*, vol. v. p. 339 (Lond. 1744, fol.).

FATHER SECCHI ON SOLAR DISCOVERIES.

TO THE EDITOR OF THE ACADEMY.

October 29, 1872.

SIR,—I regret that absence from London has prevented my replying to Father Secchi's letter earlier.

You will be able to inform him that you did not ask me to review the German edition of his book; and I hope that he will measure the regret which I felt in making the strictures I felt myself in duty bound to make by the unwillingness I showed—of which you can assure him—in undertaking the review. Having said this, I may add that I have just risen from a hasty glance at the German edition of which mention has been made, and I am rejoiced to acknowledge that in my opinion it breathes quite a different spirit from the earlier French one; so much so that, if we are not dealing with the work of the German editor, I am certain many scientific men in many lands will hail it as an indication that Father Secchi will probably do them justice in future; that he has not done justice in the past is an opinion I share with every man of science with whom I have spoken on the subject, including many of his own countrymen.

This being so, I do not feel it necessary to enter so freely into a discussion of the points raised as I otherwise should have done. I must however say a few words.

1. With reference to the work of the Kew observers in connection with planetary action, the memoirs referred to by Father Secchi were preceded by one dating as far back as 1863, communicated by Dr. Balfour Stewart to the British Association in that year.

2. Father Secchi does not deny the work of Henry and Rutherford (the difference between A's and B's types of stars is not in question); and if that work existed, I hold—and this is all I said—it should have been referred to when subsequent similar work was considered at length.

3. If the two propositions concerning the cause of the formation of solar spots do not exclude one another, why does Father Secchi say that one idea is more probable than the other?

4. With regard to the gases in the interior of the sun, the question of their transparency is not raised, nor shall I raise it now. What I said was, in other words, that Father Secchi seemed to base his proof of what would amount to an *absorption* in a *radiating* gas on the *absorption* of an *absorbing* gas such as the earth's cool atmosphere (p. 106).

J. NORMAN LOCKYER.

New Publications.

- BOSI, L. *Lezioni di Patologia e Chimica medica*. Pisa.
 BRUNETTI, L. *Due Casi di Trasposizione laterale completa di tutti i Visceri dell' Uomo*. Padova.
 CHAPMAN, H. C. *Evolution of Life*. Philadelphia.
 COHN, F. *Beiträge zur Biologie der Pflanzen*. 2. Heft. Breslau : Kern.
 DUB, J. *Die Anwendung des Electromagnetismus, mit besonderer Berücksichtigung der neueren Telegraphie*. 2. Aufl. 1. Lief. Berlin : Springer.
 EDWARDS, W. H. *The Butterflies of North America*. Part 10. Philadelphia.
 FORNARA, D. *Studi esperimentali sopra l'azione dell' Upasantia e del Veleno del Mospo, fatti nel Museo zoologico della R. Università di Bologna*. Genova : Sordo-muti.
 HALLOWELL, B. *Geometrical Analysis*. Philadelphia.
 KOCH, F. E., und WIECHMANN, C. M. *Die Mollusken-Fauna des Sternberger Gesteins in Mecklenburg*. Neubrandenburg : Brünslow.
 KÖTTERITZSCH, T. *Lehrbuch der Electrostatik*. Leipzig : Teubner.
 MISSION SCIENTIFIQUE au Mexique et dans l'Amérique centrale. *Recherches botaniques publiées sous la direction de J. Decaisne*. 1^{re} partie : *Cryptogamie*. Par E. Fournier. Paris.
 PÉRARD, A. *Catalogue raisonné des Plantes croissantes naturellement ou soumises à la grande culture dans l'arrondissement de Montluçon*. Paris : Savy.
 RITZMANN, E. *Beiträge zur Aetiologie und Pathologie der Erysipels*. Schaffhausen : Schoch.
 SCHERING, J. E. *Werke von C. F. Gauss*. Bd. VII. (*Theoria motus corporum coelestium in sectionibus conicis solem ambientium*.) Gotha : Perthes.
 SOLBRIG, A. *Ueber die feinere Structur der Nervenelemente bei den Gasteropoden*. Leipzig : Engelmann.

History.

The Tradition of the Syriac Church of Antioch concerning the Primacy and the Prerogatives of St. Peter, and of his Successors, the Roman Pontiffs. By the Most Rev. Cyril Behnam Benni, Syriac Archbishop of Mossul. Translated under the Direction of the Author by the Rev. Joseph Gagliardi. Burns, Oates, and Co.

ARCHBISHOP BENNI, a Syrian prelate, who took part in the Vatican Council, has published a collection of extracts from Eastern (chiefly Syriac) documents in behalf of papal authority. His readers are expected to look upon these extracts as exhibiting the primitive tradition of the East, as shown "by a diligent enquiry into the teaching of *its great writers*, who faithfully handed on to their successors those inviolable truths which they had received from their forefathers, in whose ears was still ringing the voice of the Apostles," &c.

If the book were intended for the learned, Archbishop Benni's preface might easily awaken the suspicion of being ironically written, for it is impossible, in fact, to display the nakedness of the land to intelligent eyes more completely than is done by this collection of extracts. But the majority of its readers must necessarily be incompetent critics of the evidence put before them, and if we may judge of them by the list of subscribers, they will have but little hesitation in concluding that the Eastern Church has always taught the dogmas lately defined in the Vatican Council.

The book consists of 228 extracts, of which the first 103

(constituting the most considerable portion of the work, and philologically the most interesting) have reference to St Peter. The second part (extracts 104–127) is on "the Roman Church," and the third (extracts 128–228) on "the Roman Pontiffs, the successors of St. Peter." The last document of the first part is in Latin, and was printed in Rome. The other documents of this part are in general rhetorical or poetical extracts in honour of St. Peter, but contain nothing whatever favouring doctrine peculiar to Rome. And the compiler would have no difficulty in drawing up similar collections of texts in honour of St. Paul, St. James, or St. John.

The rest of the work is more important for the compiler's purpose. But even here a very large number of the texts quoted are quite irrelevant. Whole chapters, such as that on excommunication, are simply superfluous. No one ever denied that the bishops of Rome, like all other bishops, might lawfully refuse their communion to individuals or churches. The important thing to be proved is that individuals or churches out of communion with Rome are out of the pale of the Catholic Church. Many texts have no reference, direct or indirect, to Rome, but it is modestly assumed that whatever authority the Easterns attribute to their patriarch is a reminiscence of "the authority which by Divine Right was conferred to the Roman Pontiffs." The liturgical evidence is exceedingly meagre. The extracts from the "Syrian Liturgy" do not extend further than extract 108; those from the "Syro Chaldaean" stop at 112; three extracts from the "Syro-Maronite" (119, 123, and 124) are certainly not ancient. Of the extracts from the "Syriac fathers" (or rather fathers whose writings are preserved in Syriac) all but three belong to part 1. Of the remaining three, one is the corrupt form of a well-known passage of St. Ignatius, who is erroneously imagined (p. 84 note) to have written in Syriac; another (109), attributed to St. James of Sarug, is acknowledged to be apocryphal; and a third (154), attributed to St. Athanasius, is a notorious forgery. The documents attributed to the Council of Nice are also well-known forgeries. The reference (174), stating that to the Roman bishop "the pontifical power over the whole world has been given as it has been defined in a canon of the Constantinopolitan Council," is a ludicrous misrepresentation of a canon which the popes have always execrated. The references to Sardica, Ephesus, and Chalcedon, are familiar to us from Latin and Greek sources, and (in Syriac at least) add nothing to the information we already possess. I must, however, warn English readers against the translation of extract 176, quoted from the Council of Ephesus to show that popes "are above Councils." The Council is made to say that it came to its decisions "*unavoidably compelled* by the canons, and by the letters of our most holy Father, and co-minister, Celestine, Bishop of the Roman Church." The Greek original has been the verb *ἀναγκάζειν*, which, as every decent scholar knows, does not imply the least kind of authority or superiority. Any-one, however inferior his position, who proves his point constrains (*ἀναγκάζει*) the person he convinces. Now the word  in the Syriac version exactly corresponds to the Greek. It need mean nothing more than "rationibus movere." An excellent example of this use of the word will be found in Ebedjesu's *Nomocanon*, tract. vii. c. 6, where a patriarch says he is *forced* to grant an exemption to a monastery; the only compulsion being that the reasons for so doing are satisfactory.

The chief strength of the book with reference to unlearned readers lies in those extracts which have not the least particle of claim to represent Eastern tradition. The

strong passages, without a single exception, represent not Eastern, but Roman, tradition.

Moses of Mardin, for instance, is quoted (211) as offering Pope Julius III. a profession of faith in his own name and in that of his patriarch. But the important passage following this extract is not quoted. Moses proceeds to say that hitherto he had made no profession, because his patriarch had charged him not to be overhasty, "donec ipsam professionem probe assequutus essem," that is, until he had well learnt his lesson in Rome. "And now I perceive," he adds, "that *your* profession" (he is speaking to the cardinals) "is like a light placed on a candlestick," &c., as in text 217, quoted in proof of "Their inerrancy." This is the profession made at Rome by a *convert*. And Assemani, from whom Archbishop Benni has borrowed his extracts, adds— "Haec ille; cuius tamen fidem Ignatius ejusdem Patriarcha nequaquam ratam habuit, ut postmodum compertum est."

The earliest and most sincere Eastern converts to Rome were the Maronites. They were formerly Monothelites, and are said to have had a devotion to Pope Honorius. William of Tyre in his history (lib. 22, c. 8) calls Maro a haeresiarch, and, when speaking of the union with Rome, says—"Abjurato errore quo diu periculose nimis detenti fuerant, ad unitatem Ecclesiae Catholicae reversi sunt, fidem orthodoxam suscipientes, parati *Romanae ecclesiae traditiones* cum omni veneratione amplecti et observare." This is to be borne in mind when reading text 134, and the like. Nor is it to be forgotten even when reading Nestorian or Monophysite writers. Archbishop Benni repeatedly quotes Benattibus, a Nestorian canonist. But the writings of Benattibus have been extensively corrupted. And Assemani (*B. O.* tom. iii. part i. p. 545) expressly says that, just as the Jacobites had altered the text of Benattibus, "ita Maronitae crediderim quaedam addidisse vel detraxisse, quae ad suam religionem confirmandam facerent."

What I have said of Moses of Mardin holds good with reference to Raban Ara (138) (who was a mere monk, not a Catholicus or Primas), to the Jacobite bishops who wrote to Innocent IV., and to certain Chaldaean prelates. In the middle of the sixteenth century, Suláka, one of the claimants of the Nestorian patriarchate, came to Rome, abjured his Eastern doctrines, and, professing unconditional obedience to the pope, was consecrated under the name of John. The present views of Archbishop Manning might with equal justice be quoted as evidence of the traditional doctrine of the Church of England.

On one point connected with these Chaldaean prelates it is necessary to say a few words. Archbishop Benni has quoted Elias of Babylon (199) as saying—

"Even [the Metropolitan of] our See of Babylon was not elected by itself, as those of other heretics who have lawlessly multiplied Patriarchs in the world without the permission of the see of the great Church of Rome: but it was by the command of the Pope, and by an order of the Roman Church, that the see of Babylon was filled up. Thus much is to be found written in our Annals, and thus it is that we have before received [our] power up to this day."

Here is a positive historical statement which would be most important if it were true. But it is notoriously untrue. It is either a wilful falsehood or an incredibly ignorant blunder. Not once or twice, but over and over again, as Archbishop Benni cannot but be aware, has the honest and learned Joseph Assemani indignantly protested against this delusion, as an invention of the partisans of Suláka under the stress of controversy with their own countrymen. The pope had created an Eastern patriarch. The Nestorians said, and with perfect truth, that such a thing had never been heard of. The adherents of Suláka talk about their annals, but they had none in reality, except those which they possessed in common with their Nestorian opponents. And the only

way in which they can be defended from the charge of deliberate falsehood is to suppose that they mistook Antioch, as being in the Roman empire, for Rome.

By far the strongest extracts (and the most numerous) are taken from Joseph II., bishop of Amida, afterwards Chaldaean patriarch. He certainly was a very remarkable man. He has left an interesting autobiographical sketch. In his pursuit of knowledge under difficulties he even attended Mohammedan schools, and read so many bad books that he considers it a divine mercy that hell had not yet overtaken him. But in this unhealthy literature he unfortunately did not reckon the Pseudo-Isidorian decretals, which he quotes twice (126, 154) in the extracts selected from him by Archbishop Benni. Are these decretals part of the primitive tradition of Antioch? Is not the mere fact of believing in them a proof that we have here to do with the corrupt traditions of the West?

The language of adulation, when addressed to a pope, is naturally expressive of orthodox ultramontane doctrine. "When you speak," says the author of a certain dedication, "men crowd to listen with that awful reverence as to holy oracles or divine prophecies." The person so addressed was Nell Gwynne, but it would not be difficult to quote similar language addressed by one Eastern ecclesiastic to another. And if it were addressed to the bishop of Rome, the author would naturally speak of St. Peter in the style common to Christians of all Eastern and Western churches, and all this, "with continual adorations, perpetual bowings, and semipeternal kneelings before the holy feet" (I am quoting Elias of Babylon), would produce exactly the kind of evidence suited for Archbishop Benni's book. Now this kind of testimony is what no Eastern ecclesiastic who wanted the pope's help would hesitate about for a moment. In his mouth it would mean no more than "I am, Sir, your most obedient servant." It is the bait which Orientals have repeatedly tried, and sometimes with success, to impose upon Rome, even when they were doggedly resolved to make no real concession. Archbishop Benni is aware of these attempts, for he avoids quoting certain testimonies which would have suited him admirably, had not the exposure of the fraud been close at hand. But he has not always been successful in avoiding cases of this kind. Assemani and Lequien consider the testimonies of 1247 as fraudulent as those of 1223; and Archbishop Benni is silent about the latter because Raynaldus has shown their insincerity, but he produces the former because Raynaldus was imposed upon by them as the Dominicans had been before him. But perhaps the most notorious fraud ever practised upon Rome was perpetrated in the name of Gabriel, who is introduced to us as "the 97th successor of the Evangelist St. Mark," and is quoted oftener than St. Ephrem—I need hardly say, in support of doctrines for which St. Ephrem might be searched in vain.

What has this Gabriel to do with the tradition of the Syriac Church? He was an Egyptian Monophysite by whom (or in whose name) Rome was most shamelessly deceived. The whole embassy described by Baronius in the appendix to his sixth volume was an impudent imposture, as is admitted by Roman Catholic as well as by Protestant writers. The Carmelite Thomas a Jesu is not less strong in his expressions than the Protestant Geddes. Renaudot and the Bollandist Sollier allow that nothing came out of the whole business. And, quite recently, a letter written by a contemporary, and to some extent an eye-witness, the famous Cyril Lucaris, Melchite patriarch of Alexandria, has been published, in which he speaks of—

"illam illusionem, potiusquam legationem, cum revera impostura fuerat cuperdam Coptae vel Eutychiani qui se Romam profectus Alexandrini

patriarchae legatum falso professus fuerit. . . . At creato Paulo fraudeque detecta, ille bonus legatus Roma clam ejactus, ne forsitan palam fieret conoedia, hic in Aegyptum se retulerat."

I have said that the chief strength of Archbishop Benni's book lies in those extracts which really represent Roman, and not Eastern, tradition. These are mixed up with others, and the unlearned reader is left under an impression that all the writers give more or less the same testimony, which is, indeed, very far from being the case. But if all the Roman witnesses were cut out, I should still refuse to accept Archbishop Benni's representation of the Eastern tradition, even as regards the patriarchal authority. In the first place, he has only given those extracts which describe one stage, and a very modern one, of the Nestorian patriarchate. He wishes to represent it as absolute, and therefore does not scruple to omit qualifying clauses of the utmost importance. He quotes, for instance (160), a synod forbidding metropolitans and bishops "to violate any order, command, or decision of the Patriarch," &c., but he leaves out the important addition, "when he commands according to the will of Christ." According to theories now in vogue, the will of Christ is inferred from the absolute nature of the authority which commands. But it was not always so, even in the Roman Church. I am, however, quite willing to grant that absolutist ideas were dominant (on paper at least) at the time that Ebedjeshu wrote his *Nomocanon*. But these ideas were not primitive, any more than the tendencies in behalf of hereditary succession in the patriarchate. The *Nomocanon* itself bears witness to this. Under the head, "They are above Councils," we are treated to extracts from the Synod of Dadishū, which say that "Bishops cannot summon any Synod against their Head and leader," that he is to judge his inferiors, but that "his own judgment is to be reserved to Christ." But every reader of the *Bibliotheca Orientalis* knows that the supposed Synod of Dadishū is a forgery, and every reader of the *Nomocanon* of Ebedjeshu knows that provision is made in the canons for the synodical judgment and deposition of the patriarch for heresy or other misconduct (see tract. viii. c. 20, can. 4 and 5, also c. 21). More than one patriarch has, in fact, been synodically deposed. Even the forged letter of the "Occidentals" given in the ninth part of the *Nomocanon* reserves the judgment of the patriarch to the *other patriarchs*, or to the sovereign. It is easy to understand why Archbishop Benni passes over all this in silence.

If we exclude the irrelevant evidence, and that which is manifestly purely Roman, there still remains that of the spurious Arabic canons attributed to the Council of Nice. The importance of these has been much exaggerated in consequence of their being accepted by the different Eastern communions. From the hostile feeling which keeps these communions apart, it has been argued that none of them would borrow from another, and that what is common to them all must be anterior to the schism. But *a priori* arguments like this require to be very rigorously verified. It was on exactly similar grounds that the Samaritan recension of the Pentateuch was formerly supposed (but most erroneously, as every scholar is now aware) to be of the utmost antiquity and purity. These Arabic canons contain gross anachronisms which prove them to be of much more recent date than the beginning of the schism. The hostile feeling referred to has not, in fact, been of a nature to prevent borrowings, especially of forgeries bearing names which did not awaken sectarian animosity. Nor has it been as persistent as is commonly thought. The Moslem invasion was productive of pacific and even kindly intercourse, sometimes closely approaching to religious intercommunion, between the separated churches, and great writers like Elias

of Damascus on the Nestorian and Barhebraeus on the Jacobite side wrote treatises to prove that the great Eastern communities were equally orthodox in fact, that their differences were verbal, and that party spirit alone kept them asunder. There are repeated instances on record (see Lacroze, *Histoire du Christianisme des Indes*, tom. ii. p. 115) of Nestorians applying to Jacobites for bishops; the identity of *rite* being considered by them as of greater importance than the difference of dogmatic formula. And as for borrowing of literary forgeries, there is the well-known case of the Jacobites adopting the Nestorian fable of the transfer of the patriarchal dignity to the see of Seleucia. There is nothing in the Arabic canons on the dignity of the Roman see to shock either Nestorians or Jacobites, because they all consider that see as having disappeared from the Church many centuries ago. The canons therefore merely represent to them fragments of ecclesiastical discipline which have long since become obsolete. We have at present no means of determining the date of this forgery. The manuscripts which contain the canons are not of very great antiquity. The earliest writer who can be referred to as recognising their existence is Elias of Damascus; but no sensible person will accept such a reference as extract 156 as a proof that they existed at the time of this writer. A collection of canons admits of an indefinite amount of increase, for which the author whose name it bears is in no way responsible. A very large number of the MSS. of Dionysius Exiguus contain documents which he certainly had not included in his collection. We require, then, to see the collection of Elias of Damascus as a whole, and to know its literary history as we know that of Dionysius Exiguus, before we can be sure that he really knew of the spurious Arabic canons of Nice. As to the propagation of canons supposed to be favourable to Rome, there is no historical difficulty whatever. The catholicism of Rome was for a long time most powerful, nay dominant, in the East. Besides the Latin kingdom of Jerusalem, there were the principalities of Tripoli and Edessa, the latter extending beyond the Euphrates. The principality of Antioch lasted for more than a century and a half. There was the nation of the Maronites, and there was the Armenian kingdom under the house of Rupen. In Alexandria one of the Melchite patriarchs was in communion with Rome, and sent a deputy to the Lateran Council. It is not improbably to his influence that the "Filioque" has found its way into the canons attributed to St. Hippolytus. This, too, is the time of the daring fraud of the "ancient missionaries" denounced by the learned Dominican Lequien in his *Panoplia contra Graecos* (p. xiv), and of those "spurious and lying testimonies" forged in support of papal authority which imposed upon St. Thomas Aquinas and all Latin theologians for many centuries.

The Arabic canons themselves, however, furnish us with a clue which enables us to conjecture their origin with a great amount of probability. De Marca long ago called attention to the canon which placed the island of Cyprus under the jurisdiction of the patriarch of Antioch. *Is fecit cui prodest.* The Maronite patriarchs of Antioch exercised jurisdiction in Cyprus over several bishops and churches of their own communion, and it was most probably in their interest that the canon was forged in justification of an ecclesiastical arrangement directly at variance with ancient rule. If the fraud owes its origin to a Maronite hand, it is not to be wondered at if in some of the canons great authority is ascribed to the Bishop of Rome.

Fraud and forgery are not pleasant words, but they are unfortunately unavoidable in a discussion of the pontifical claims which Archbishop Benni has at heart. And if the whole truth must be spoken, his own book is itself no better

than a pious fraud ; in saying which I do not wish to imply that the Archbishop is not the dupe of his own legerdemain. Far less would I wish to make any imputation on the excellent Italian priest by whom the book has been made accessible to English readers, and whose perfect sincerity in the pursuit of truth and knowledge is beyond all suspicion.

P. LE PAGE RENOUF.

The Patriarch and the Tsar. The Replies of Nicon. By William Palmer. Trübner and Co., 1871.

THE general impression this book leaves upon us is that there is a good deal of fine confused cursing up and down it. Nicon overwhelms his adversaries with torrents of invective from the Bible and the Fathers and the Councils against the sins which he chooses to impute to them (and his instinct is generally sound), and now and then clenches the matter with a vigorous bit of denunciation of his own. To appreciate the full oddity and the full impressiveness of the book it ought to be read through ; perhaps the best single passage to which to refer the reader is the peroration which contains an elaborate series of instances of boldness and audacity, drawn up because Nicon had been accused of audacity and wished to retort the charge. The following is a curious specimen of "boldness," "With boldness the children of Israel 'groaned by reason of their bondage.'" Of course Nicon was a barbarian, and his sense of the ridiculous had received at the best a very one-sided development : he accumulates forty pages of quotations from the Old Testament in the New, to prove that uninspired writers ought never to dispense with an appeal to authority. Feeling himself that this was, if possible, a superabundance of testimony, he puts a cross at the beginning and at the end, that weak brethren may skip ; but in general the torrent of quotation flows unchecked. Prince Nikita Orloffsky was employed to draw up a sort of handybook of Russian law, rather too much in the interest of the Tsar. Among other things this code enacted that the church property in the suburbs of Moscow and other cities should revert to the State. Nicon will not allow that the church has or can have property, and writes out several chapters of the Pentateuch about the Levites and the suburbs assigned to them, because they had no heritage, and then breaks out into something like eloquence :—

" Consider, thou fighter against God, Prince Nikita, how thou speakest of those suburbs as belonging to the patriarch, and to metropolitans, and bishops, and monasteries. Do they not all belong to God ? And we belong to Him, all, except thou and such as thou. Ye are not His."

Again, Nikita had enacted penalties against those who perjure themselves after kissing the cross—a form of oath consecrated, one might have thought, by the example of St. Vladimir, who commended it in his historical testament to the respect of his sons. But Nicon could not remember any Greek precedent to authorise the national oath, so he writes out two or three curious pages of St. Chrysostom against swearing in the abstract, to prove that unauthorised oaths are a mortal sin, which he reviles Nikita in a running fire of parentheses for committing. These instances are sufficient to show that Nicon's replies are quaint enough to compensate for their prolixity, and there is one very picturesque account of a scene with the imperial commissioners in which he had an opportunity, which he used to the full, of imitating St. Basil defying his persecutors. To most Western readers it will be new to find the Canons of Carthage and Sardica, including the one on appeals to Rome, part of the recognised common law of the Russian Church in the seventeenth century, while the official history of the apostacy of the Pope, which is dated from Formosus, and his con-

sequent deposition from his primacy among the patriarchs almost makes the efficacious businesslike romance of the Pseudo-Isidore respectable.

Students to whom these considerations are familiar will be apt to complain that an isolated translation of a pamphlet, which even without the appendix attains the dimensions of a history, is hardly the most useful supplement to such an history as Mouravieff's, especially as the questions of the Boyar Simeon Streshneff, and the answers of the Metropolitan, Paisius Ligarides of Gaza, are only given in an analysis, which is not full enough to enable us to judge of this plausibility. We have only the skeleton of the secularist indictment, while the hierarchical defence is given *in extenso*.

For the replies of Nicon are quite sufficient to prove that the real question at issue was whether the Patriarch or the Tsar was to be supreme in Russia, and that we cannot resolve it away into an ordinary quarrel between barbarous nobles and an overbearing favourite. Nicon's own *ex parte* statement gives the impression that in the actual dispute he was substantially in the right (though it is strange that he should have imagined he was honouring the sacraments by refusing them to criminals under sentence of death), but that his difficulties were in great measure of his own creation, and that he did not choose his ground for resistance well.

Nicon's aim was to restore in Russia the purity of the Byzantine Church, just as it was the aim of the Tractarians to restore in England the purity of the Church of the Fathers. Like them he hated liberalism and modernism as much as slovenliness, though he had more to do with the latter, and only knew the former in the shape of importations of Polish pictures and quotations from Aesop's fables. He had all their energy, all their singleness of mind, all their obstinacy, all their scrupulousness. He could not have their culture—which would not have saved him, as it did not save them, from attributing an unreal homogeneity to the past, and trying to build upon a mirage.

When first chosen to the patriarchate, he exacted a pledge of spiritual obedience from the Tsar and the nobility. When the Tsar absented himself from public worship, he protested solemnly in the presence of the people that he could no longer act as patriarch. He seems to have been influenced partly by the duty, as he regarded it, of fleeing from persecution, partly by a sense that, as the Tsar by encroachments on church property and by subjecting ecclesiastical persons to his own courts had broken one side of the compact, he could no longer be held to the other. He really "struck," and it was not for two years that his opponents formed the design of treating this strike as a resignation vacating the chair. Meanwhile Nicon had had time to recollect himself and to reconnoitre the strong points of his position. The Tsar had recognised him as patriarch after his protest, and there was no ecclesiastical authority in Russia competent to deal with a patriarch. It was worse than useless to hope to cope with him by importing a Pangloss *in partibus* like Paisius, who had committed two plain and almost unpardonable offences against ecclesiastical law by living in Latin communion and accepting Latin orders, and again by interfering in Russia beyond his nominal diocese at all.

The incurable weakness of Nicon's position was that the Tsar was the real centre of everything in Russia. One Tsar had fetched some patriarchs from Constantinople to make him a patriarch of his own ; another could always fetch some more when he was tired of the particular plaything called Nicon. The prestige of the Tsar more than half subjugated Nicon himself ; his bitterness against his other opponents goes to the full measure of what a prelate in the seventeenth century permitted himself ; his bitterness against the Tsar

never carries him beyond the measure of what a prelate or at least a religious newspaper might think permissible in the nineteenth.

G. A. SIMCOX.

First Part of the Royal Commentaries of the Yncas by the Ynca Garcilasso de la Vega. Translated and edited, with Notes and an Introduction, by Clements R. Markham'. London : printed for the Hakluyt Society. Vol. I., 1869 ; Vol. II., 1871.

MR. MARKHAM'S translation was so much the more necessary as Garcilasso's great work was to this day almost untranslated. Sir Paul Rycaut's elucidation, published in London in 1688, and dedicated to James II., is only an abridgment, omitting no less than fourteen out of the twenty-six chapters in the first book and seventeen out of the twenty-eight in the second. Besides, the worthy knight (for such was Rycaut's title), who happened to be but very slightly acquainted with the Spanish tongue, had a trick of wildly guessing at the sense, which process was very ingenious indeed, but not so accurate as it might have been. Of the innumerable blunders with which he interspersed his version of the *Royal Commentaries*, Mr. Markham cites one which is characteristic. Speaking of "five Indians in Cuzco who played the flute very well from any music-book for the organ that was placed before them," Garcilasso adds, "*Eran de Juan Rodriguez de Villalobos vecino que fue de aquella ciudad*"—"They belonged to Juan Rodriguez de Villalobos, formerly a citizen of that town" (l. ii. ch. xxvi.). Rycaut renders it : "They belonged to one Juan Rodriguez, who lived at a village called Lobos, not far from this city."

In the short preface with which the first volume opens, Mr. Markham has summed up very exactly the little we know of Garcilasso's life. He was born at Cuzco in 1540 from Garcilasso de la Vega, "one of the few honourable cavaliers of noble blood among the conquerors of Peru, and Nusta Isabel Chimpa Ocllo, grand-daughter of Ynca Tupak-Yupanqui. He was brought up amidst the civil wars which raged for years in the newly conquered empire.

"Almost every week, he tells us, some of the relations of his Indian mother came to visit her; and on these occasions their usual conversation was on the subject of the former grandeur of the fallen dynasty, of its greatness, of the mode of government in peace and war, and of the laws ordained by the Yncas for the good of their subjects. The half-caste boy listened eagerly to these conversations ; and at last, when he was about sixteen or seventeen years old, he began to put questions to an old Ynca nobleman, who was his mother's brother, and received from him the story of the origin of the Ynca dynasty."—"The young Ynca had a wonderful start of all contemporary travellers, for he was born, as it were, in the midst of his work, and began to store his material as soon as he could speak."

However, he did not use it so soon, for after his father's death in 1560 (not in 1550, as Mr. Markham, through a printer's mistake, seems to say), being just twenty years of age, he left America for ever, went to seek his fortune in Spain, became a captain in the army of Philip II., and never dreamt of composing his countryman's history until forty years later, at which time he must have forgotten a great part of what he had heard in his boyhood. So he wrote to all his surviving schoolfellows, "asking them each to help me by sending me an account of the particular conquests which the Yncas achieved in the provinces of their mothers," which they did accordingly. He then made careful extracts from such of the Spanish historians as had spoken of Peru, Cieza de Leon, Agustin de Zarate, Gomara, Acosta, and, above all, Blas Valera, whose papers, half destroyed by the English in 1596, are now entirely lost. At least the fourth part of the *Royal Commentaries* is copied almost word for word from those historians, so that I think there is a little exaggeration in Mr. Markham saying that without Garcilasso's work "our knowledge of the civilisation

of the Yncas, the most interesting and important feature in the history of the New World, would indeed be limited." If, by some mishap, the *Royal Commentaries* had been lost, we would find in Cieza de Leon and the others nearly all the material that a "rather garrulous" Ynca has drawn out in his long-winded narratives, especially possessing, as we do now, the works of some posterior writers, Herrera, for instance, or Montesinos, whose importance for the early periods of Peruvian history is almost unrivalled. I know Mr. Markham is not of the same mind, and sets but little value on the information of Montesinos, whom he looks upon as a second-hand authority. If I be allowed to express my opinion here, I think Montesinos is now treated by Peruvian scholars as Manetho was by the chronologists of the seventeenth and eighteenth centuries. Before the dawn of Egyptology, almost all the critics had adopted entirely the traditional data of Herodotus, Diodorus, and other classical writers of greater or less authority : they held the Manethonian lists of Egyptian kings to be mere fictions, and did not give them much more reality than that Mr. Markham seems inclined to give to Montesinos' lists of Peruvian sovereigns. We know how the case of Manetho v. Herodotus ended, and how it was proved that after all "that impostor of a Sebennytian priest" was perfectly right. I am very ready to admit, not that all the traditions collected by Montesinos from the mouth of the *Amautas* are historical truth itself, but that they are a nearer approach to historical truth than some of the traditions inserted in Garcilasso's *Royal Commentaries*.

I need not say that Mr. Markham's translation is most accurate. Mr. Markham's accuracy as a translator has been well known since he published for the Hakluyt Society the *Narrative of Pascual de Andagoya*, the *Travels of Cieza de Leon in the Years 1532–1550*, the *Life and Acts of Don Alonzo de Guzman, 1518–1543*, and other equally interesting works from the time of the Conquest. The notes, philological as well as historical, derive a great interest from the fact of Mr. Markham having personally explored Peru and learned the Quichua tongue. The two maps in the second volume, exhibiting one the plan of Cuzco, ancient and modern, the other the Sacsahuaman or great Ynca fortress of Cuzco, are very serviceable to make the reader understand the chapters which contain the description of the imperial city of Cuzco (book vii. ch. viii.–xiii.) and of its fortress (book vii. ch. xxvii.–xxix.).

G. MASPERO.

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SCHULTE, J. F. v. Die Glossen zum Decret Gratians von ihrem Anfang bis auf die jüngsten Aufgaben. Wien : Gerold's Sohn.

Philology.

An-Nadim's Index of Arabic Literature. [Kitâb al-Fihrist, mit Anmerkungen herausgeg. von Gust. Flügel. Nach dessen Tode besorgt von Joh. Rödiger und Aug. Müller. Zwei Bände. Mit Unterstützung der Deutschen Morgenl. Gesellschaft. Zweiter Band, die Anmerkungen und Indices enthaltend. Von Aug. Müller.] Leipzig: Vogel.

NOT much later than it was promised appears the second volume of this very important work (see *Academy*, vol. iii. pp. 17-19), by which the text already published is for the first time made fully available for study. One is almost sorry that the publication of the first part was not delayed till the second could appear with it, for no doubt many an one will have been too impatient to put off the study of the text, much as he may have wished for the notes, while to read the commentary afterwards by itself is of but little use, even if it be possible.

The commentary is Flügel's own work. The editor, Dr. Müller (a *Privatdozent* at the university of Halle) has been at the pains to subject the almost completed but not finally revised manuscript to a careful but considerate redaction. He has made few additions of his own.

It is clear that Flügel worked at these notes for many a long year. Only a man of his untiring industry and wide reading, especially in the literary histories and bibliographical works of the Arabs, could accomplish such a task. He also benefited by the counsel of his old friend, Professor Fleischer, the undoubtedly chief of living Arabic scholars; I seem to detect this wholesome influence in other passages besides those in which it is mentioned.

The importance of the commentary consists not so much in the explanation of the subject-matter as in the literary notices. And rightly so, not only because the work of An-Nadim himself is predominantly bibliographical, but also because a complete explanatory comment, even if such could be produced by a single scholar, would have assumed far too large dimensions. The literary notices are all the more copious, sometimes rather too much so, as when he quotes the secondary and the original authorities side by side, e.g. the *Marâ'id* together with *Yâkût*. With regard to the Arab scholars mentioned in the *Fihrist*, the material supplied by printed texts is quoted almost *in extenso*, and much from manuscripts besides. But the notes also contain much that illustrates the text in other ways, e.g. the translation of many difficult passages, especially the poetical ones—a great boon to the reader. Here and there, too, the subject-matter is for good reasons explained at greater length. We are thus presented with many valuable additions and corrections to the earlier work of Flügel on the section relative to Mani. His notes on the equally important but extremely obscure section on the heathen of Harrân are naturally less copious, because here he was limited to conjectures. The present writer has been also much occupied with these chapters, especially the darkest of all, that on the mysteries, and thinks he is in a position to solve some of the difficulties, especially by a retranslation of the strange-looking sayings into Syriac. But we are not here upon solid ground; at any rate matters of this kind are better treated in a monograph.

The commentary also contains much that relates to the criticism of the text. I notice especially that the deficiency complained of in my review of the first volume—the omission of the variants to the section on Mani—has been completely remedied, the variants being supplied by the editor according to a new collation.

It is but natural that a work of such innumerable details should not be without mistakes and hiatuses. Every

Orientalist who is in any degree at home in one of the many departments touched upon in the *Fihrist* will be able here and there to offer corrections and additions, without any disparagement to the uncommon merits of the author. Flügel himself often modestly admits that he was unable to explain this and that point, particularly where the subject is one which only concerns the Arabist indirectly. I mention this in order to prevent the few small additions and corrections which a varied reading has suggested to me in several passages from being interpreted in the light of a disparagement to the author.

To the careful discussion of the word *lîbr* (Anm. 6, p. 9) I may be allowed to add that it seems to be used of the common black ink in two late and incorrect Syriac receipts for the preparation of that fluid (Wright's *Catalogue of Syriac MSS.* pp. 580b and 581a).—Page 23, line 23, the corrupt and misread word *mohtawi* conceals the Syriac *bêth mawtibhê*—the name given by the Nestorians to those books of the Old Testament which belong neither to the Pentateuch nor strictly to the Prophets. The fact that this catalogue of the books of the Bible is really of Nestorian origin was mentioned in my review of the first part. This accounts further for the mode of writing “Ruth” with an ‘Ain, which struck Flügel as peculiar; in line 7, where a Jewish authority is used, the word is naturally given according to the Hebrew orthography without that letter.—In the discussion of the original conclusion of the great historical work of Tabarî and its appendices (Anm. 5 to p. 234), special reference should have been made to Ibn-al-Athîr, viii. 68, of which more than half the first part is entirely based on Tabarî.—The identity of the Mandaeans and the *Moghtasila* (Anm. 10 to p. 340), which I formerly accepted myself, is no longer tenable. The Elkesaites or *Moghtasila* have had great influence on the ceremonies and in part also the dogmas of the Mandaeans, but in other respects the two are very different. The celebrated verse in p. 142, 16, is not erotic, but refers to the relation of Nâbigha to his princely patron, with whom he had fallen into discredit (cf. Ahlwardt's edition, No. 17, v. 28).—It must be due to a momentary forgetfulness that Flügel speaks of the poet ‘Omar b. abi-Rabi'a as if an entirely unknown person (Anm. 17, p. 306).

The indices by Dr. Müller are comprehensive. They are obviously of particular value in a work of this kind, which within a comparatively small compass (I had supposed the *Fihrist* to be a much larger work from what I knew of the contents) contains such a vast amount.

As long as Orientalists continue to be instructed by the work of the excellent bookseller An-Nadim, so long will the name of Flügel survive as that of its first editor and expositor, who by discretion and persevering industry has accomplished more than many a scholar his superior in genius and width of view. In conclusion, hearty thanks to both the young scholars, by whose exertions this posthumous work has become accessible to us. TH. NÖLDEKE.

The Semites in their Relation to the Hamites and Japhethites.
[Die Semiten in ihrem Verhältniss zu Chamiten und Japhethiten.]
By J. G. Müller. Gotha: Besser.

THE table of generations in the 10th chapter of Genesis contains the ethnological theories of the Hebrews about the nations with whom they were acquainted at the time of the first kings. These all belong to Blumenbach's Caucasian race, and group themselves into three families of nations, with the three sons of Noah, Ham, Shem, and Japheth, for progenitors. It is probable that the popular Hebrew opinion of that time reckoned amongst the sons of Ham all the peoples that were akin, in language and civilisation, to

the Egyptians; amongst the children of Shem, all those that were similarly related to the Hebrews, who are designated as descendants of Shem; amongst the sons of Japheth, all the tribes standing in a kindred relation to the Medes and Greeks—a view which nearly every one who has studied the passage in question has read it as conveying.

The author of the book before us judges quite otherwise of this tenth chapter, inasmuch as he takes it to contain a scientific truth, rather than a popular belief. At least this is the only intelligible explanation of the way in which he dwells on its supposed inconsistencies, and undertakes to bring them into harmony with acknowledged scientific certainties. After the author has determined on etymological and antiquarian grounds that the five sons of Shem, Elam, Asshur, Arphaxad, Lud, and Aram, are Indo-Germans, he observes that the same must hold good for Eber, Joktan, and Jerah, the ancestors of the Hebrews, the Arabians, and the Chaldaeans, who were descendants of Arphaxad. But if this remark is applied to the whole nations, it would follow, as the author concludes, that the Hebrews, Arabians, and Chaldaeans were Indo-Germans, and spoke Indo-Germanic languages. But this view is opposed by their language, which we know, and which is, closely related to the language of Canaan; and Canaan is mentioned as a descendant of Ham. If these two facts are regarded as equally certain, nothing is left but to declare the Semites to be Hamitic Indo-Germans! According to Professor Müller there are properly speaking neither Semites nor Semitic languages, only Hamites and Indo-Germans. What we call Semites are only Indo-Germans who have adopted Hamitic languages, and what we are accustomed to call Semitic languages are at bottom only Hamitic dialects adopted by Indo-Germanic nations.

Though all these conclusions are correct from the logical point of view, there is much to be urged against them. In the first place, it is exceedingly hazardous to argue from the unknown to the known, *i.e.* from the nationality of the unknown Arphaxad to the nationality of the known Jews, Arabs, and Chaldaeans. In the second place, the proof on which the relationship of the so-called Semitic with the Hamitic languages depends is so far incorrect that it rests upon a complete misconception of the whole state of the question. None of the scholars who have pronounced the Semitic and Hamitic languages to be related suppose the relation to be as close as that between the Hebrews and Phoenicians, as the author, in support of his hypothesis, appears to assume.

The author seems altogether to have overlooked the contradictions into which one falls as soon as one begins to look upon the table of generations as a piece of ethnology, and is driven to accept the consequences that follow from it. For if we realise to ourselves the relation of this table to its author, we find only two possible alternatives: either the author started from a tradition still living amongst his countrymen, or he had made independent researches respecting language, customs, and other points of ethnological significance. On the first supposition it would be unreasonable to separate those Semites whom he looks upon as Indo-Germans from the other children of Japheth; while on the second hypothesis it would be impossible to defend him from the charge of shallowness, in placing Phoenicians and Egyptians in the same linguistic family.

We have therefore no choice but to follow the example of most unprejudiced Biblical scholars, and regard the genealogical table as a piece of popular ethnology of limited scientific value. It is consequently labour in vain to try to harmonize each point in it with the rest and with the results of modern science. It is self-evident from this that in

forming our opinion of the Semites as a nation we must restrict ourselves to such authentic data as language, literature, civilisation, &c., which determine the judgment of an ethnologist. We also see that the Semites, although linguistically related to the Hamites, yet are clearly distinguished from them and form a family by themselves. The Semitic languages are distant collaterals, not descendants, of the Hamitic, just as the Germanic languages are not daughters, but sisters, of Sanskrit. Indeed, Semites and Hamites stand much farther apart than the different groups of the Indo-Germanic family, for these agree in the formation of the cases as well as in their pronouns and roots, while Semitic and Hamitic languages only agree in their pronouns and a few roots, their conjugations and declensions being entirely different.

In conclusion we cannot refrain from observing that, although Professor J. G. Müller has collected a number of important facts respecting the history of Semitic civilisation, and has accompanied them by some excellent remarks, he has been led by his philological deficiencies in the field of the Semitic languages to a variety of unfounded hypotheses which will seriously impair the value of his work to theologians as well as to ethnologists. FRIEDRICH MÜLLER.

THE ENGLISH MSS. OF TERENCE USED BY LENG AND BENTLEY.

DR. FRANCIS UMPFENBACH, whose edition of Terence (Berlin, 1870) exhibits for the first time a complete collation of the most ancient MSS. of that author, including the Bembine, devotes an interesting article in the *Philologus* of this year (pp. 442–477) to a discussion on the MSS. not collated in his edition, but quoted by Lindenbrog, Leng, and Bentley. This discussion derives additional interest from the new light which Dr. Umpfenbach has thrown on the vexed question of the relation of the various families of Terentian MSS. to each other. Ritschl divided them into two classes: a more ancient, represented by the venerable Bembine, the Victorianus, and perhaps the Decurtatus; and a more modern, in which the recension of Calliopius, a grammarian of a comparatively late period, is followed. This theory is now disproved by the discovery that both the Victorianus and Decurtatus exhibit the Calliopean recension in a modified form, and corrected from the commentary of Donatus. This modified Calliopean recension appears also in parts of the Ambrosian, in the Vienna as well as in the Cologne fragments, and in the Laurentianus xxxviii. 27; it in fact constitutes a third family, distinct, on the one hand, from the Bembine, which stands alone in a class by itself, and, on the other, from the MSS. exhibiting the unmodified Calliopean recension. (See Umpfenbach's edition, pref. pp. i–iii, lxviii–lxix.)

After a discussion, more or less detailed, of the *vetus codex* of Lindenbrog, which A. Fritsch inclines to identify with a Paris codex now numbered 7905, and an article by Fritsch himself on the Codex Parisinus 7903A, a MS. belonging to that modified Calliopean group, of which the Victorianus and Decurtatus are the best known specimens, the English MSS. employed by Leng and Bentley are treated.

(1) Of the *Regii*, or MSS. in the King's Library, Bentley quotes several. The most valuable of these, described by him as *chartaceus sed ex optimo exemplari transcriptus*, is identified with a paper MS. of the fifteenth century now in the British Museum, and numbered Regius 15. A. xi.—a MS. of the modified Calliopean group, though differing from the Victorianus and Decurtatus in the order of the plays, which is that of the pure Calliopean recension, *Andria, Eunuchus, Heautontimorumenos, Adelphi, Hecyra, Phormio*. Where two *Regii* are mentioned, Dr. Umpfenbach considers it certain that the second is that marked 15. A. xii. of the tenth century; that he employed others as well seems rightly inferred from such expressions as *unus ex Regis recentior* (see Bentley's note on *Hec.* v. 4, 12). Leng also used a MS. belonging to the King's Library; this, it would seem, was distinct from either of the two *Regii* above mentioned as Bentley's.

(2) Bentley speaks several times of a MS. which he calls *Academicus 900 annorum*. Among the MSS. which Leng used were two lent him by the Bishop of Norwich, which he styles severally *Na* and *NB*. In the characteristic passages, *Ad.* iii. 2, 26, *animam*; *Phor.* iii. 3, 16, *tum igitur*; probably also in the omission of *Phor.* ii. 3, 7, *neque eius—negat*, Dr. Umpfenbach concludes that Bentley's *Academicus 900 annorum* is Leng's *Na*. The writer of this article is indebted to the kindness of Mr. J. E. B. Mayor, late Librarian of the University Library of Cambridge, and just appointed to the chair of Latin recently vacated by Professor Munro, for a collation of the only MS. in that library which can be supposed to represent Bentley's *Academicus 900 annorum*. It is marked Ff 6 4, and did actually belong to John Moore, Bishop of Norwich, as Mr. Mayor concludes from the book-plate *municipal regia 1715*, and the signature *J. Norvicensis* which appears on the first page. But that it cannot be Bentley's 900-year codex is placed beyond all doubt by a comparison of the readings which follow with those quoted from Bentley by Umpfenbach, p. 467, even if it were not certain that Ff 6 4 was not written in the ninth century.

READINGS OF Ff 6 4.

<i>Andria</i>	iv.	4	54	<i>volum.</i>
		v.	4	25
				<i>tibi</i> not over erasure.
<i>Eun.</i>	iv.	4	47	<i>ei</i> <i>oi.</i>
	"	7	19	<i>armis</i> without erasure.
<i>Heautont.</i>	i.	1	71	<i>incerto.</i>
	iii.	1	1	<i>lucescit.</i>
	"	43		<i>Satrapes.</i>
	"	48		<i>pittisando.</i>
	v.	1	4	<i>dicta.</i>
	"	3	6	<i>facit.</i>
<i>Ad.</i>	i.	1	16	<i>dissimili.</i>
	iii.	2	26	<i>animum.</i>
	"	3	68	<i>Demea</i> (without <i>a</i>).
	"	4	5	<i>hac audiuit.</i>
<i>Hec.</i>	iv.	4	1	<i>tibi quoque edepol sum iratus.</i>
<i>Pho.</i>	i.	4	25	<i>via.</i>
	"	52		<i>deficiet.</i>
	ii.	3	8	the line is not wanting.
	iii.	2	6	<i>An. ei metuo lenonem ne aliquid suo fusat capit. GE. idem timeo ego.</i>
	"	41		<i>sterquilinium.</i>
	"	3	26	<i>dum igitur.</i>
	iv.	3	14	<i>ut eius tentarem</i> [sic, for the latter part of the MS. is a much later transcript] <i>sententiam.</i>
	"	38		<i>libuit</i> (without interlineation).
	v.	3	9	<i>natam</i> (not after correction).

Nor, on the other hand, can the only other MS. of Terence now in the Cambridge University Library, that marked Ff 4 39, and which formed part of the original library given by Archbishop Rotherham, be the missing *Academicus*, for, besides that it does not agree in *And.* iv. 4, 54; v. 4, 25; *Eun.* iv. 4, 57, the three cardinal passages in which it was collated by Mr. Mayor, it cannot be older than the fifteenth century. (See pp. 472, 511, vol. ii. of the Catalogue of MSS. in the University Library of Cambridge.)

(3) Leng used for his edition (1701) a MS. belonging to Freville Lambton, Esq., *ex agro Dunelmensi*, i.e. in the county of Durham. Freville Lambton's pedigree may be found, as indicated to me by Mr. Mayor, in Surtees' *Durham*, iii. 36. He was buried August 28, 1731, *act. 70*. He was owner of Hardwick Park, Sedgefield, in that county. The MS. which is called by Leng *Dunelmensis* had at the beginning of every scene coloured figures of the actors, and at the beginning of each play a pictured *aedicula* or small cabinet containing the masks. Two leaves were wanting, one containing *And.* iii. 1, the other *And.* iv. 3. Both Krauss and Brix agree in supposing this codex to be identical with that called by Bentley *veterissimus*; it would be interesting to prove whether this conjecture is well founded; but the MS. has not been forthcoming for the last 150 years, and, like the far more valuable Cologne MS. of Silius Italicus, is perhaps no longer discoverable. Leng calls this much the finest of all his MSS., and any one who would bring the lost treasure to light would confer a service which would be appreciated by every student of Latin philology.

(4) After a short description of the *Petrensis* and *C. C. C.*, the one belonging to Peterhouse, now St. Peter's College, the other to Corpus Christi College, Cambridge, two MSS. used by both Leng and Bentley, Dr. Umpfenbach comes to the *Ship-*

penianus, a MS. lent to Leng by Robert Shippen, Fellow (afterwards Principal) of Brasenose College, Oxford. Here, at any rate, we are able to clear up a doubt, for this MS. is certainly that now in the library of Brasenose, numbered xviii. in Coxe's Catalogue (*Catalogus Codicum MSS. qui in Collegiis Aulicis Oxoniensibus hodie adservantur*, Oxonii, 1852), and assigned by him to the eleventh century.

Of the other codices of Terence briefly noticed in the *Philologus*, nothing need be said. The Oxford *Donatus*, occasionally cited by Bentley, may be No. xlvi. in the library of Lincoln College, a parchment MS. of the fifteenth century: it is perhaps more probable that it was one of those in the Bodleian.

R. ELLIS.

UNIVERSITY ORGANIZATION.

SOME scientific men, and some resident and other members of the Universities of Oxford and Cambridge, have been holding a conference to consider the low state of learning and science in the two older universities—its causes and its remedies. The impulse to the movement at this particular time has been given by the commission which is now enquiring into the revenues of the colleges, and which is expected to report next session. The wildest and most diverse schemes are floating in the air for the appropriation of these endowments, each of which schemes will no doubt find backers when the time comes. The fear is that there may be a scramble, and that a government dependent for its existence on a House of Commons majority may find it expedient to distribute the treasure-trove among the clamorous. The friends of learning and science, who might not unreasonably claim the whole, come forward asking to be first considered. They based their combination and their further proceedings upon a resolution which ran in these words:—

"The chief end to be kept in view in any redistribution of the revenues of Oxford and Cambridge is the adequate maintenance of mature study and scientific research, as well for their own sakes, as with the view of bringing the highest education within reach of all who are desirous to profit by it."

This resolution was signed by about seventy names, and was followed up by a conference or consultation of the persons signing, as to the development which should be given to the general proposition thus affirmed. The meeting was held at the Free-masons' Tavern on the 9th November. Among those who took a part in the proceedings were Sir Benjamin Brodie, Drs. Carpenter, Burdon-Sanderson, Appleton; Professors Rolleston, Huxley, Seeley, Clifford, Robinson Ellis, Thiselton Dyer; Messrs. Mark Pattison (Rector of Lincoln College), Ray Lankester, Henry Sidgwick, Newton (of the British Museum), A. J. Ellis, Sayce, Bywater, Sidney Colvin, Simcox, Cheyne, &c.

A discussion was taken on the following topics:—Research in Physical Science compared with that in other sciences in England; National Importance of Mature Study as a means of increasing Knowledge; Importance of Research as improving the Quality of Education; the Abolition of Prize Fellowships; Necessity of an Increase in the Number of Professors; the Introduction of new Branches of Study, e.g. Archaeology; the better Organization of the Teaching in the already existing Branches; &c.

It was distinctly stated in the course of discussion that this was not a political movement, and that its object was not to back up the present, or any, government in any political measure. Those present were there to consider purely academic and scientific interests. Great dissatisfaction was expressed at the present bestowal of the endowments. An annual revenue, vaguely estimated at 170,000*l.*, is spent in educating about 2000 students. Of these two thousand, it is a low estimate that more than half are "passmen," and passmen may be said to learn nothing worth learning, but spend three years in arriving at the degree of a B.A. Of the other, and smaller, half of the student body, the education is more or less successful. But there was not the same unanimity as to the exact value to be assigned to the results of the education of the "honour" students. Dr. Rolleston thought that great advantage was obtained for the public, by passing a number of mediocre men through a mill which makes them useful machines in their country. At the same time he intimated that examinations for fellowships, where the candidates were older, and therefore ought to have made special studies, was an unsatisfactory repetition of the examination for degree.

He thought that examination was in its place and useful as a stimulus for younger pupils.

Dr. Carpenter dwelt on the necessity of providing a maintenance for men whose hearts were in the work of research. If England was behind Germany in original investigation, it was not, as is sometimes said, because Englishmen are inferior to Germans in ideal power, but because the German universities are so arranged as to afford a career to men who choose to devote their lives to study. In England such young men, having no means of making a livelihood by the pursuit of science, are obliged to turn their attention to a "practical" profession.

Sir Benjamin Brodie wished to found in the universities certain specific institutions for the promotion of scientific research. He knew we should be told that this was not an object about which the nation should care. But he pointed to certain institutions which England does keep up, and at very considerable cost, which have solely science for their object. Such are the Royal Observatory at Greenwich; the Meteorological Observatory at Kew, and, above all, the British Museum. The universities with all the means at their disposal did nothing of this kind, the Radcliffe Observatory and the Bodleian Library at Oxford being both private foundations. He would not trust to the growth of professorships singly, but would like to see certain specific institutions representing the various departments of human knowledge. Such institutions should not be disconnected from the work of teaching, but should fulfil the very highest educational work, viz. the training up for the service of the country a body of teachers in the respective sciences.

Professor Seeley argued the uselessness of the fellowships as at present bestowed. He met the argument usually urged by the defenders of fellowships, viz. that they give talent a start in life, by asking why the professions should be specially provided with such advantages rather than any other career? The fellows of colleges were not a class of men with whom any fault can be found. They are all occupying themselves in some way usefully, only not in science, learning, or mature study.

The Rector of Lincoln deprecated the notion of pulling down the present tuitional system, and setting up a professorial in its place. This was the idea of the Commission of 1854, and it had proved an entire failure at Oxford. The tutors had beaten the professors out of the field: for the tutors kept tight hold of the university examinations, and with this powerful leverage to work with, they made it impossible for a professor who gave instruction in the higher parts of his subject to get a class to attend him. He wished to set about reform not by destroying the existing teaching machinery, but by raising its level. Nor would he abolish the fellowships, but convert them. The present mode of bestowing fellowships was indefensible. A fellow had no duties. He would convert the college fellowships into a body of teachers, on a graduated scale, so arranged that the whole body should be connected with education; but while the lowest grade should be wholly occupied in teaching, the highest grade, to rise to which time would be required, should be exempt from the drudgery of lecturing. In this way only could the love of learning and the spirit of research be introduced among the tutors. The best of the tutors felt keenly the pernicious effect of the grind to which they were at present subjected, and would gladly be relieved from it. But the system was too strong for them. As to the proposal of affiliating colleges, or sending teachers out of the universities to the centres of population, he should not see any objection to doing so, provided that these branches were in close connection with the organized hierarchy of instructors whom he would set up in the place of the college fellows.

Mr. Newton urged the desirability of introducing the study of Archaeology into the universities, of organizing it in connection with the existing collections, and of reuniting it to the pursuit of historical research. The study of archaeology requires, first, museums where practical acquaintance can be made with the monuments, and curators for the charge of those museums; and, next, professors to bring before students the last results of archaeology throughout Europe. The British government and private enterprise had done much for the collection of archaeological materials in this country. Their systematic employment was a task which ought to be fulfilled by the universities.

After the discussion, which was broken off at this point by the lateness of the hour, the persons present agreed to form themselves into a "Society for the Organization of Academical Study."

Intelligence.

The last number of the *Altpreußische Monatschrift* (vol. ix. parts 5 and 6) has an interesting though somewhat superficial account of the High German dialect of East Prussia, by G. Hoffheinz. It appears to be of a highly composite character. Not only has it been strongly modified by the Low German of the bulk of the earliest colonists, but has also adopted many words from the Slavonic dialects of the original inhabitants. It is important to observe that the writer distinguishes between the *j* of *Feist* and that of *Jott* (= *Geist* and *Gott*), the former being a pure *j*, the latter a more guttural sound, which precise one it is impossible to tell from his account. Here, as elsewhere, the weakness of his phonetics is to be regretted. Thus, after stating that *s* before *t* and *p* becomes *sch*, he goes on to say that the same is the case in the pronunciation of Greek, which he expresses by writing σχτούθη for στούθη!

A new review has been set on foot at Hongkong, under the title of *The China Review*. It is edited by Mr. N. B. Dennys, the former editor of *Notes and Queries on China and Japan*, the extinction of which useful serial has been so much regretted. The place of honour in the first number is given to a paper on Dr. Legge's *Shih King*, by the Rev. E. J. Eitel. The review is intended to appear every two months.

A new edition of the *Mahabhashya*, Patanjali's great commentary on the grammatical Sutras of Panini, with the commentary called *Bhashyapradipa*, and a new commentary by Pandit Rajarama, from the Benares College, has just been published in that city. This is the first complete edition of this important work ever printed; as the late Dr. Ballantyne's edition comprises only the fourth part of the first *Adhyaya*, and therefore only the thirty-second part of the above complete edition.—*Trübner's Record*.

The *Göttingische gelehrte Anzeigen*, No. 44, contains a review of recent works on the Assyrian language and antiquities by Schrader, Sayce, Lenormant, and Finzi. The well-known writer who signs himself H. E. expresses himself without the slightest reserve in favour of the decipherers of the inscriptions, and only exhorts them to caution in the comparison of other languages. H. E. differs from Professor Schrader (*Academy*, vol. iii. p. 340) in ascribing but little scientific value to the syntax in Mr. Sayce's grammar; the reader will do well to verify H. E.'s report of the contents of that book for himself.

On December 3, Mr. George Smith, of the British Museum, will read a paper before the Society of Biblical Archaeology on "A Cuneiform Inscription containing the Chaldaean Account of the Deluge." We hope this important text, which is said to resemble the story in Berossus, will be published as early as possible. It is on one of the clay-tablets found by Mr. Loftus at Warka.

M. de Campos Leyza has written a *Clef de l'Interprétation hébraïque* in 612 large octavo pages (Paris: Maisonneuve). He there "demonstrates" that there are about fifty fundamental roots, of which about forty are onomatopoeic. The work, we regret to say, is absurdly unscientific, and only shows how much the study of Hebrew in France lags behind that of other Oriental languages.

Contents of the Journals.

Jüdische Zeitschrift (Geiger), vol. x. No. 4.—The Prefaces of Saadia to *Agron* and *Galuj*. [Based on an account by Firkowitsch of the newly discovered prefaces to Saadia's lost works, *Agron* and *Galuj*. The Hebrew prefaces (there is also an Arabic one) to the former work is also given in full from the Hebrew serial *Lebanon*. Firkowitsch states that he also possesses other works of Saadia, including a fragment of his commentary on the Pentateuch.]—On the Moabite Inscription; by J. Auerbach. [Reads, l. 17, 18, כָּל (or כְּלָי) לֹא יְהוָה וְאַסְפָּרָה, i.e. "Mesha burnt all the Levites of Jehovah before Chemosh;" לְיִלְיָה : cf. Olshausen, *Lehrbuch*, p. 413. Geiger also proposes to read, l. 13, 14, שְׁמָרָת אֶלְיָה, "the men of Chereth" : cf. 1 Sam. xxii. 5.]—On Jer. xx. 17. [בְּרֵחָה, not st. const. of בְּרֵחָה, but a noun, found in *Berachoth*, 44b, 57b, *Abodath Elilün*, 29a = "womb."]—An Unknown Commentary on *Sifra*; by M. Steinschneider. [MS. No. 59 at Munich.]

New Publications.

MÉNANT, J. *Les Achéménides et les Inscriptions de la Perse*. Paris: Maisonneuve.

ERRATA IN NO. 60.

Page 433, col. 2, line 19, for "seizes" read "serves."
" " " " 33, for "some" read "none."

The essential point of Pasteur's communication consisted in regarding any portion of a living organism when deprived of access to oxygen as capable of acting as a ferment in respect to fermentable substances in contact with it.

THE ACADEMY.

"INTER SILVAS ACADEMI QUARRERE VERUM."

Vol. III.—No. 62.

Readers are reminded that the mention of New Books, Articles, &c., in our lists is intended as a guarantee of their importance. The Editor of THE ACADEMY cannot undertake to return communications which are not asked for.

The Editor cannot reply to questions from authors respecting the notice of their books.

The next number will be published on Wednesday, January 1, and Advertisements should be sent in by December 28.

NOTICE TO SUBSCRIBERS.

This Number completes the Third Volume of THE ACADEMY: which will be ready by the 1st of January, comprising 24 Numbers, bound in cloth, price 18s. Covers may then be had of the Publishers, price 2s. The Index and Title-page will be published with the next Number, January 1.

General Literature.

Love is Enough; or, The Freeing of Pharamond a Morality.
By William Morris. Ellis and White, 1873.

THE conception and arrangement of Mr. Morris' last poem are singularly refined and perfect; and it is written throughout with an intensity and seriousness which many readers will be inclined to contrast favourably with the half querulous half indolent *insouciance* which runs through much of the *Earthly Paradise*, and finds a definite expression in the *Apology* and *L'Envoi*. The poem begins with a conversation between Giles and Joan, who are two married peasants, in a crowd at the pageant of an emperor's marriage. They speak in octosyllabic couplets, and the imagery of their speeches is homely, and Joan mistakes the marshal's sergeant for a knight: otherwise it may be doubted whether any peasants out of Arcadia ever expressed themselves with such elegant simplicity and propriety. Then after a short song, which, like all in the poem, begins with the words, "Love is Enough," the emperor and empress appear and exchange lofty courtesies about their love in heroic triplets, each of which is followed by a burden. Then we have the mayor in alliterative lines begging leave to present a play. He feels called to apologize for the subject, which seems to depreciate rank and prosperity; as equally of course he regards the rank of the emperor and empress with loyal complacency; equally of course they give a gracious dispensation for the play to proceed.

The story of the play deals with familiar elements; but they are treated in an abstract passionate way that is anything but familiar. Pharamond succeeds his father, who is killed in battle, and for five years works wonders in defence of his kingdom. Through all these years he has been haunted by the vision of a maiden in a valley shut in by mountains, over which the only pass lies through a yew wood. At last he breaks down under his longing; and, after passing nine days in lethargy, sets off with his foster-father to find the reality of the vision. It seems they met with many adventures in their search; but these are only used for a scene of dreamy reminiscences; it is hardly worth while to enquire which come from Calprénéde, which were invented for a story which upon reflection the poet did not care to tell. It

is not till the search has lasted for years, and hope has failed, that Love reveals himself, and then withdraws to make way for the beloved in the very valley of the vision where Pharamond has lain down in a mist to die. While Pharamond has been longing for her, Azalais has been longing, not yet for him, but for love; and so when she sees him, she too recognises that she has been longing for the meeting.

After the first raptures are over, Pharamond, to please his foster-father, and to gratify his natural self, or what is left of it, goes back to his kingdom to resume it if he can. He finds that Theobald the constable (whose *lâches* did much to aggravate his early difficulties) has usurped the throne to the general satisfaction. Accordingly he goes back to his love under the impression that he is too good for a king, and that there would be little pleasure in conquering his subjects after conquering their enemies. The emperor and empress are much pleased with the play, and wish in vain that they could make friends with the players; but they are cut off by their rank from a felicity which is reserved for Giles and Joan. After each scene there is a musical interlude, which becomes more and more like a hymn; and Love delivers an address to the audience, which becomes more and more like a sermon by a saint; and the talk of Giles and Joan as they go home from the show lets the reader down gently and happily to common life again.

When we pass from the conception to the execution, it is impossible to speak too highly of the rich rapturous melody of the songs, which are all in long anapaestic stanzas with double rhymes, that have an echo here and there of Mr. Swinburne—perhaps inevitable, but hardly welcome. We extract the last and the sweetest:

"LOVE IS ENOUGH! Ho ye who seek saving,
Go no further; come hither; there have been who have found it,
And these know the House of Fulfilment of Craving;
These know the Cup with the Roses around it;
These know the World's Wound and the balm that hath bound it:
Cry out, the world heedeth not, 'Love, lead us home!'

He leadeth, He hearkeneth, He cometh to you-ward;
Set your faces as steel to the fears that assemble
Round his goad for the faint, and his scourge for the forward:
Lo his lips, how with tales of last kisses they tremble!
Lo his eyes of all round that may not dissemble!
Cry out, for he heedeth, 'O Love, lead us home!'

O hearken the words of his voice of compassion:
'Come, cling round about me, ye faithful who sicken
Of the weary unrest and the world's passing fashion!
As the rain in mid-morning your troubles shall thicken,
But surely within you some Godhead shall quicken,
As you cry to me heeding, and leading you home.

Come—pain ye shall have, and be blind to the ending!
Come—fear ye shall have, mid the sky's overcasting!
Come—change ye shall have, for far are ye wending!
Come—no crown ye shall have for your thirst and your fasting,
But the kissed lips of Love and fair life everlasting!
Cry out, for one heedeth who leadeth you home.'

Is he gone, was he with us!—ho ye who seek saving,
Go no further; come hither; for have we not found it?
Here is the House of Fulfilment of Craving;
Here is the Cup with the Roses around it,
The World's Wound well healed, and the balm that hath bound it:
Cry out! for he heedeth, fair Love, that led home."

The following lines are perhaps as fair a sample as can be isolated of the tone and doctrine of Love's discourses:

"Have faith, and crave and suffer, and all ye
The many mansions of my house shall see
In all content: cast shame and pride away,
Let honour gild the world's eventless day,
Shrink not from change, and shudder not at crime,
Leave lies to rattle in the sieve of Time!
Then, whatsoe'er your work-day gear shall stain,
Of me a wedding-garment shall ye gain

No God shall dare cry out at, when at last
Your time of ignorance is overpast ;
A wedding-garment and a glorious seat
Within my household, e'en as yet be meet."

The last line seems hardly finished ; and there are other indications here and there that Mr. Morris has lost something of his easy mastery in abandoning the ruder form of the heroic couplet which he inherited from Chaucer. The writer himself seems to be aware of a more serious fault : with all his gracious delightful fervour, Love argues and insists too much ; his discourses are not merely a commentary on the poem, they are a defence of it, almost a criticism ; and it is only a very youthful literature which is ingenuous enough to permit itself such confidences. Perhaps, too, it might be said that the several disguises of Love, who sometimes appears as a maker of images, sometimes as a maker of pictured cloths, have little value for the reader ; though, if there could be found worthy actors and a fit audience, they would add another grace to the pageant.

It is hard to pronounce upon a single trial whether the revival of alliterative rhythm will be a permanent addition to our poetical resources. We are inclined to think that Mr. Morris himself has gained by it a greater directness and energy of expression, and consequently more of the eloquence of passion, and this without any sacrifice of delicacy ; but after all he has not yet shaken our impression that the harmony of regular metre was a decided artistic progress.

Here is an extract from the speech of Azalais, as she sees Pharamond asleep :—

" As one hearkening a story, I wonder what cometh,
And in what wise my voice to our homestead shall bid him.
O heart, how thou faintest with hope of the gladness
I may have for a little if there he abide.
Soft there shalt thou sleep, love, and sweet shall thy dreams be,
And sweet thy awaking amidst of the wonder
Where thou art, who is nigh thee—and then, when thou seest
How the rose-boughs hang in o'er the little loft window,
And the blue bowl with roses is close to thine hand,
And over thy bed is the quilt sewn with lilies,
And the loft is hung round with the green Southland hangings,
And all smelleth sweet as the low door is opened,
And thou turnest to see me there standing, and holding
Such dainties as may be thy new hunger to stay—
Then well may I hope that thou wilt not remember
Thine old woes for a moment in the freshness and pleasure,
And that I shall be part of thy rest for a little."

Perhaps the anapaestic movement is here as elsewhere too unbroken, indeed there are whole paragraphs that only want rhymes to remind us of Mr. Swinburne when he writes in a minor key. But we feel it is ungracious to criticize music at once so rich and so simple : the idyllic grace of Azalais' awaking shyly to the consciousness of love furnishes the ideal relief after the passionate scene in which Pharamond's hushed intense expectation passes through sweet music into the trance in which she finds him.

The charm of the *Earthly Paradise* was that it gave us the picturesqueness of earth with the atmosphere of fairyland ; we drifted along a swift current of adventure under a sky heavy with sweet dreams, through which the dew of death fell without dimming the sunshine : we were amused and yet enthralled. In his new work Mr. Morris demands more of the reader ; instead of abandoning himself to a passive fascination, he has to be penetrated with a profound and earnest passion : we have to live in the poem, not to dream of it. Consequently it will not be surprising if *Love is Enough* attracts fewer readers than the *Earthly Paradise*, though those who are attracted will be held longer under a deeper spell. Those outside the charmed circle will perhaps complain that the figures which move within are shadowy, because their own desire does not burn within them.

G. A. SIMCOX.

Björnson's Sigurd the Crusader. [Sigurd Jorsalfar. Af Björnstjerne Björnson.] Copenhagen : Hegel.

THIS drama is what is called "a piece for the people," *folke-stykke*, that is to say, a work which addresses all classes, of whatever culture, of whatever age, and which aims at linking them all together in the sympathetic remembrance of glory in the past. Björnson is a consistent, though a violent, democrat, and lays his art at the feet of the people, giving them a stage-play which they can understand, and which will ennoble them. Such is his aim ; but, being a true artist, he cannot be bound by his own theories even, and what he writes, though on the surface patent to all, in truth demands a subtle and cultivated attention to appeal to.

A Jorsalfar was a man who had performed the pilgrimage to Jerusalem or Jórsalir ; such a man was called in Icelandic Jórsala-fari, or Jerusalem-farer, whence the Norwegian form Jorsalfar. Several heroes in the Sagas bear this appellation, but none equal in fame the great King Sigurd Magnusson. In his day, Norway was reigned over by two rulers, bearing joint power. For Magnus, dying, had left his crown to his sons Eystein and Sigurd, to be worn by each. But one crown will not cover two heads ; the brothers jarred and quarrelled, and the unification so laboriously won by Harald Fair-hair seemed on the point of being lost. Then Sigurd, wild for travel, threw up the reins of government and sailed into the south. In Morocco, in Spain, in Apulia, he won renown ; eight times he smote the heathen and stormed Sidon ; before the tomb of Christ he knelt, and swam over Jordan. Then his silken sails flew up the Levant, and his glory culminated in a splendid entrance into the imperial city of Micklegarth. All this while Eystein had made laws, built churches, laid down roads, protected fisheries, and with fair words won the lost province of Jæmteland. Back came Sigurd, insolent with success, and by his wonderful achievements dazzled the eyes of all. Again the brothers, Eystein, the modern man of progress, Sigurd, the type of a mediaeval warrior, clashed and differed. The match that lit the train was an outrage committed by one of Sigurd's men, and with this begins the drama.

A Jorsalfar of Sigurd's had killed one of Eystein's men ; and in the first scene before us, he tries to steal the dead man's bride out of the palace. He is caught and shut up in prison, and Sigurd chooses to consider this a personal insult to himself. The greater part of the first act is taken up with the excited conversation which the alarming position of affairs draws from Sigurd's warriors. We learn incidentally that Borghild, the fairest woman in Norway, has been long promised marriage by King Eystein, but that he has delayed so many months that she has suffered shame of it, and immediately it appears that Sigurd will make her the instrument of his revenge. Suddenly the scene changes, and we are in the house of Borghild at Dal. She is alone, at night ; weary with waiting, shamed in her love. Like another Mariana, she is ready to die of weary waiting. Sigurd, unannounced, presents himself to her, splendid and masculine, like a sea-eagle bathed in sunset colour, with the gold and the silk of the East upon him. The dialogue here becomes masterly. He offers her his hand and a seat on the throne by his side ; he appeals to their joint grudge against Eystein, to her sense of his neglect, and, pleading passionately with her, wins her. All combines to fight against her constancy : her weariness, pique, and shame, the vigorous beauty of Sigurd so suddenly presented before her, conquer her resolve, and she flies with him. At the very moment, the horsehoofs of messengers from Eystein, bringing a bridal escort for her, clatter into the courtyard, but it is too late.

In the next act, the brothers quarrel in open hall over

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the beer-horns. To prove his triumph, Sigurd commands Borghild to be led in, gorgeously attired, surrounded by her maidens. Sigurd, sure of his point, calls upon her to choose between them, and she, still resentful, instantly prefers himself. But as Eystejn goes, he speaks a word of grave sorrow to her, and her heart relents. The old passion floods her heart again; she turns to Sigurd: "You thought I loved you? Ha! ha! I took you only as poison to destroy my love for him!" When he approaches her, she swoons with horror. Sigurd turns mad with baffled passion and the sense of failure which is death to men of his stamp. When he recovers his senses, he resolves on a new voyage to chase away chagrin, but just before he starts, he has a meeting with his brother; old grievances are removed, old wounds healed, and instead of faring out over seas again, he stays at home and helps Eystejn in his plans of social progress. We are not told what becomes of Borghild.

Such is *Sigurd Jorsalfar*, a poem with some incongruities of ancient practices and modern theory, and a mere sketch at best. Still it is a sketch by a master, and in itself masterly, with much excellent by-play that it is not possible to be just to in a short review.

EDMUND W. GOSSE.

Hamann's Life and Works. [Johann Georg Hamann's Schriften und Briefe. Zu leichterem Verständniß im Zusammenhange seines Lebens erläutert und herausgegeben von Moritz Petri.] Parts 1 and 2. Hanover : Carl Meyer.

THE complaint that Hamann's life and writings are not so well known or so highly valued as they ought to be has been repeated so often as almost to answer itself. A writer who has been rediscovered with enthusiasm several times during the last half-century, whose works have been collected into eight volumes, whose life has been written in three or rather in five volumes, whose monument has been restored at government expense, who occupies a page in the *Biographie universelle*, and a chapter in any German history of literature, cannot exactly be said to suffer from neglect. One admirer, who has published a *Fingerpost to Hamann*, says that in all his acquaintance he can count but ten grown men who know anything of Hamann, and that the youth of the day are not anxious to be better informed than their fathers. It does not occur to Herr Disselhoff that the result might be nearly as distressing if he were to enquire after readers who had conscientiously studied at first hand other more famous and less obscure authors of Hamann's day—Herder and Jacobi themselves, to say nothing of Mendelssohn, or Moser, or Hippel. The fact is that nothing will ever make Hamann popular, while his eminence is already conceded on all hands. Even his self-elected champions do little to increase his fame, because the difficulty of his writings, both in style and substance, is not to be explained away by pious admiration: it is easy to agree with him without understanding him, very difficult to understand him, as Goethe did, without agreeing with him, and yet hardly worth while to agree with him merely for the sake of fathoming his oracles, or of being persuaded that they were worth fathoming. Most of the modern essays, lectures, and the like, devoted to the "Magus of the North" open with what is very like a list of testimonials, the expressions of opinion by men who knew Hamann, or were capable of appreciating his real and singular genius, valuable in themselves and in a way conclusive, but not a substitute for a complete and adequate representation of his personality as it appears in the altered light of another century. Every writer on Hamann quotes Goethe's most just and penetrating sentences; but if nothing can be added to them, why write a book? As criticism they are very nearly sufficient, but if the object is only to make the present

generation acquainted with the person of him who called them forth, it seems to us that two useful things might be done. The only edition of his works is that published by Roth in 1818, very uninviting as to paper and type, with letters and pamphlets chronologically intermingled, and no notes. The only complete account of his life is in Gilde-meister's conscientious, voluminous, and thoroughly unreadable work, in which, again, letters, extracts from his works, and biographical details succeed each other in historical order, on the ground that his life and writings are necessary to explain each other. Herr Petri proposes to follow a similar course, the only difference being that he publishes the works *in extenso* amongst the letters and notices; but the principle seems to be altogether a mistaken one. Hamann's writings may be worth reprinting; if so, they certainly require an elaborate series of explanatory notes: his language was a riddle to begin with. Conceive the style of Carlyle or Richter, their native obscurities of diction enhanced by tags of Hebrew and a little Arabic, and used to express the profound and startling theological conceptions passing through what we may call a stammering brain, an active and powerful mind with the one drawback, an impediment in its speech; hence a circuitous, allusive way of saying what in itself might not be unintelligible; and an editor would have enough to do who undertook to restore the significance of all the apparently unimportant phrases, which refer, perhaps, to a forgotten criticism, by a forgotten critic, of a forgotten author, and are meaningless without a knowledge of the whole train of ideas associated in Hamann's mind at the moment of writing. And this would be only half the annotator's work, for the fugitive sheets and occasional pamphlets which make the bulk of Hamann's authorship stand in the closest relation to some of the most influential writings of his time; they represent the rebound from the dominant sentiment of the moment, but with an intricate refinement, an intellectual fantasticalness which makes a "fingerpost" by no means superfluous to decide even the elementary question whom or what the Magus means to destroy by a given spell. We can easily conceive a German editor, with the patience, the learning, and the insight into the intellectual life of the last century necessary to make Hamann's works intelligible in this way, but such an undertaking could not have the smallest pretension to popularity; its value would be real, but restricted to the class of literary and religious antiquarians. This, however, refers only to the writings published during the author's life: his letters, much the most intelligible, the most interesting, and not the least able of his compositions, require far less explanation, and, if reprinted by themselves, in a convenient form, would probably find access to a larger circle of readers than Hamann has ever yet obtained. The other desideratum will be easily supplied whenever Germany has a Sainte-Beuve; the main facts of Hamann's life are well known, there are ample data for passing judgment on his character, his person is reflected in his works, but it is given to few to see what is in sight; we want a portrait to help us to recognise all the slighter lines and lights and shadows, in the face of the original, and this is especially the case with uncommon features and a mobile expression. A thin pamphlet, by C. Carvacchi, *Biographische Erinnerungen an J. G. Hamann*, gives the most readable and compendious account of his life that has been published, but a "portrait," a literary biography of moderate dimensions and polished form, is conspicuous by its absence.

The first part of Herr Petri's work includes letters down to 1759, and Hamann's first literary undertaking, the *Socratische Denkwürdigkeiten*, published in the same year.

For this period, the present work is more complete and luminous than Gildemeister's in the biographical portions, but the notes on the *Denkwürdigkeiten* resemble nothing so much as the paraphrases of Holy Scripture sometimes published, by ill advice, for the perusal of Evangelical children, and do not allow us to hope much from the assistance of such an editor in unravelling the yet more profound perplexities of his later productions. Johann Georg Hamann was born in 1730, one of the two sons of a respectable and pious Königsberg doctor. He was carefully educated, if anything, too carefully, in ancient and modern languages, theology, mathematics, music, and other accomplishments, for the artificial breadth of interests given to him as a mere youth no doubt made it more difficult for him to fix on the choice of a profession, which would take him from the learned leisure of his father's house. Ultimately (in 1752) he decided for tuition, partly because he had educational theories, partly because his acquirements would be less useless to him than in other vocations, and chiefly because he wished to travel and see the world. A friend procured him the post of tutor to a young baron of nine, resident with a widowed mother at Riga. A short experience of his office discouraged Hamann, who wished "for a mind to form, and found a spoilt and idle baby"; he wrote to his pupil's mother a letter detailing his views, grievances, and wishes, with rather unparliamentary frankness, and in return was still more unceremoniously invited to leave the house. His zeal, no doubt, had been greater than his discretion, but his good will was acknowledged by a brother of the ungrateful baroness, who procured him a more eligible tutorship with a noble family in Courland. Here his character and abilities were valued as they deserved, but he was not happy in his office, so far as we can judge, only because there is a period of irritable arrogance in the development of most remarkable men, during which it is impossible for them to be happy anywhere. He resigned his post at the end of a year, and, returning to Riga, was domesticated in the house of a Königsberg fellow-student, now a merchant, Berens by name, who tried to interest him in the social and political importance of commercial pursuits, and led him to translate a French book by Dangeuil on the latter subject. Here he lived happily, bought books, and ran into debt, so that he was glad to accept a flattering invitation to return to Courland on his own terms. Still restless and discontented, he took the opportunity of a summons to his mother's death-bed to break off finally from an engagement that was burdensome to him, and (in 1756) to form fresh ties of a rather mysterious nature with the Berens family. There were four sons, to the youngest of whom Hamann had occasionally acted as tutor; the third, Christopher, was his most intimate friend, a man of wide culture, knowledge of the world, and an ardent advocate of all the new lights of the *Aufklärung*; the brothers had a sincere regard and a high admiration for Hamann, to whom they offered employment as foreign clerk and travelling agent, thus leading the way to his English expedition, the turning-point in his life.

After his mother's death, he paid a short visit to Berlin, and entered into personal relations with the chief *littérateurs* of the capital, then proceeded, *via* Amsterdam, with funds supplied by the Berens, to London, where, according to his own account (the only one we possess), he had weighty communications to make to the Russian ambassador and other important personages. Whatever his business may have been, he failed entirely in its discharge; he fell into bad company, spent all his money, led a disorderly life, solaced apparently by a confused hope of converting his associates, held no communication with his family or employers, and was in a fair way of becoming bankrupt at once

in health, honesty, and purse, when, by a sudden resolution, on the 8th of February 1758, he took lodgings with "Mr. Collins in Marlborough Street," began to live on gruel, and bought a Bible. Up to this time his life and opinions had certainly not been as Evangelical as his habitual phraseology, which by itself might have excused Gervinus' charge that "the traditional Königsberg pietism infected him like a plague." At Riga his Christianity had been dormant, and Berens had seen in him a possible and a valuable convert to the spirit of the age, but after his career of debauchery, in the artificial loneliness of his London lodgings, the prodigal son awoke to the error of his ways, and has recorded the consequent searchings of heart under the title *Gedanken über meinen Lebenslauf*, dated April 1758. Having bought a Bible, he began to read the Old Testament through methodically, and the first glimpse we have of the Hamann to be hereafter known to letters is his discovery, not that the history of the Jews is the type of the Christian's trials and temptations, which has been said before, and is not more exciting than an ordinary sermon, but that the career of the chosen people was a close reflection and living prophecy of the spiritual history of him, Johann Georg Hamann, with whose salvation, therefore, God had been incessantly concerned since the beginning of the world. Stories of sudden conversion are, as a rule, monotonous, but the following is original enough to deserve quotation:—

"In the books of Moses I made the strange discovery that the Jews, however unruly a people they seem to us, yet in some cases asked nothing from God but that which He desired to do for them, that they acknowledged their disobedience as readily as any penitent sinner, and yet forgot their sorrow as speedily again, and all the while called only for a redeemer, an intercessor, a mediator, without whose help they could neither fear nor love God as they ought. In the midst of these considerations, which seemed to me very mysterious, I was reading the fifth chapter of the fifth book of Moses on the evening of the 31st of March. I fell into a deep meditation, and I thought of Abel, of whom God said: 'The earth hath opened her mouth to receive thy brother's blood.' I felt my heart beat, I heard a voice in the depths thereof sighing and groaning, like the voice of blood, like the voice of a murdered brother, whose blood would be avenged if I did not give heed to it in time, and continued to stop my ears against it;—the voice that made Cain a fugitive and a vagabond. I felt all at once my heart melt, it overflowed into tears, and I could no longer — no longer conceal from my God that I was the murderer of my brother, the murderer of my brother His only begotten Son."

It has been observed that his sense of spiritual depravity did not quicken his sense of remorse for more ordinary transgressions, but it would not be fair to draw an inference from thence against his sincerity. It is good Christian doctrine that Hamann's sins were forgiven on the 31st of March 1758; and though the ungodly may find it hard to suppress a smile when, on the following page, he argues that, as God has forgiven him his sins, surely Berens may be expected to forgive him his debts, it would be the height of injustice to set him down as a hypocrite. Hamann was a curious mixture of fanaticism and common sense, but he was strictly upright and honourable in worldly matters, and even his piety was free from the admixture of charlatanism which disfigures the religion of Lavater and Jung Stilling. His doctrines were dangerous because a very strong and lively conviction that a child of God can do no wrong tempts the erring saint to remove the landmarks of right and wrong in other cases besides his own; but Hamann's nature was sound and healthy at bottom, and, except perhaps in one particular, his conduct was changed only for the better by the sanctification of his natural self-esteem.

After his conversion he found friends who enabled him to return to Riga, where the Berens received him with undiminished friendliness, and a present from his father enabled him to discharge some of the debts which, notwithstanding, continued to burden his secular conscience.

His letters to Dr. Lindner—third in the triumvirate of friends with Hamann and Christopher Berens—are our only guide to the gradual change of sentiments, almost, but never quite, leading to an actual breach between the two last. In spite of his originality and independence of mind, Hamann—and it is one of the amiable sides of his character—always felt the want of a friend to whom to confide his overflowing emotions, but the emotions which occupied him on his return from London were particularly distasteful to Berens; and Lindner, although an ecclesiastic, and a judicious mediator between the two, obviously had most sympathy with Berens. Phrases like “Let him have his business, let me keep my leisure”; “Whether I found the newest sect, or he the greatest firm; *sottise de deux parts*,” seem to give the key of the disagreement. And it is evident that, in the then overstrained state of Hamann’s mind, he must have been a puzzle, and not a pleasant one, to his sober friends. But their complaints against him were only of sentiment and language; their esteem continued, and even a distant affection, while in money matters the Berens’ generosity nearly justified Hamann’s pious reliance on Providence. A separation was decided upon when Hamann proposed to marry his friend’s sister, without any particular affection, it would seem, and in spite of their discordant views, reasoning, with an ambiguous affectation of candour, that they should not neglect means for his conversion—and what better means than a believing wife for an unbelieving husband, “or vice versa, as St. Paul says?” He is perfectly free from “venom or doubleness,” but his first concern is with his own soul, and he rides roughshod over his friend’s prejudices; when he has given offence, he claims to have it forgiven for friendship’s sake or Christian charity, and feels more strongly the present duty of his friend than his own past shortcoming; in the midst of sensible answers to a criticism of which perhaps he acknowledges the fairness, he will fly off into a tirade of Pauline humility, or cut the discussion short with an irrelevant text, “Who art thou that judgest? it is Christ that died,” or the like. In fact, the whole correspondence of this date is a most singular study of what we may call sentimental Antinomianism.

On the rejection of his suit, he returned to Königsberg, and, living with his father, spent his time in reading, or rather devouring, everything—from the Koran to Humphry Clinker—that he could lay his hands upon. In 1759, at the instigation of Kant and Berens, he published his *Socratische Denkwürdigkeiten*, which, however, was not calculated to give much satisfaction to those friends, the “two” alluded to in the motto, “Vel duo vel nemo.” The style is execrable, but the meaning made an impression on the few who fathomed it, and it was favourably noticed at Berlin, where probably that condition had not been fulfilled. The general drift is to shadow forth a parallel between Socrates and the Sophists and Hamann and the philosophers *à la mode de Sanssouci*, and again between the Socratic ignorance and the Gospel “poor in spirit”; but as each sentence is the masquerading habit of a thought which it would take a chapter to express, we must be excused a further commentary. In 1763, he contracted with his father’s maid-servant what is called a *Gewissensehe*, either because it is not of the kind to satisfy the most tender consciences, or because a more than ordinarily tender conscience is needed to ensure permanent respect for its validity. All Hamann’s biographers have been puzzled to reconcile this step with the not unmerited inscription on his tomb, *Viro Christiano*, and it will never now be decided whether he was influenced by an original theory of Christian liberty, or by supposed prudential considerations, for it was not thought fit to

publish the letters bearing on the subject in his collected works; and though Roth said, in the preface to them, in 1818, that provision had been made for their safe keeping, Gildemeister was told, forty years later, they had been destroyed. The informal union was happy enough, but in spite of the laxity of opinion and practice in Germany at the time there was some difficulty in finding godmothers for the three daughters who, with one son, completed the family, for the support of which Hamann was obliged to accept a situation as copying-clerk, his eccentricities and the Gallo-mania of his superiors debarring him from more important employment. Besides occasional reviews of books, he published, in 1772, *Kreuzzüge eines Philologen*, a collection of twelve essays, *d’après* of which he said: “The title of every book is a riddle, the answer to which tells, if not its contents, at least their value”: in other words, we are to regard the author as a Red Cross Knight tilting against most of the prevailing opinions in religion, science, and literature, in the name of the Word, the *λόγος*. It is difficult to give any idea of his manner of writing without quotation, and even more difficult to find a passage that shall be in any way intelligible out of its proper place in the author’s archipelago; for one way in which he acknowledges his own obscurity is by demanding “readers who can swim”—from one island of meaning to another, just as, when his handwriting was illegible, he put in the margin, “Imaginez et sautez.” The following is taken from the “Ninth Crusade,” headed, “Aesthetica in Nuce,” a rhapsody in cabballistic prose:—

“Salvation cometh from the Jews—I had not seen her yet; but I expected—to your shame, Christians!—sounder conceptions in their philosophic writings.—But you feel the sting of that worthy name by the which ye are called as little as the glory taken by God in the reproachful name of the Son of Man — — —

“Nature and Scripture therefore are the materials of the imitative; beautiful, creative Spirit — — Bacon compares matter to Penelope;—her impudent suitors are the worldly wise and those learned in the letter. You know the history of the beggar who appeared at the court of Ithaka; for has not Homer translated it into Greek, and Pope into English verse? —

“But wherewithal shall we awaken the expiring language of nature from the dead? — — By pilgrimages to Arabia Felix, by crusades to the Eastern lands, and by the restoration of their magic, which old woman’s cunning must make our prey, for no other is so good.—Cast down your eyes, idle bellies! and read what Bacon wisely says of magic.—If silken feet in dancing shoes will not bear you on so arduous a journey, let hyperbole show you the right way—καὶ καθ’ ὑπερβολὴν δύον μάλιστα κείνους.

He may well say, in the “Apostille”: “The rhapsodist has written with * * * * and — — —, obelisks and asterisks, like the little masters and pedants of his time”; but there were a few able and willing to read between the lines, and fill in the blanks, and even before the *Kreuzzüge* were collected, the Magus of the North, as Moser christened him, was recognised as a power. In 1775, Wieland’s *Mercur* spoke of him as the leader and representative of a party. He kept up a half friendly, half controversial correspondence with Mendelssohn and Nicolai. Lessing thought his writings a valuable test of the pretensions of the liberal gentlemen “who give themselves out for Polyhistorians”; Herder, generally so arrogant, almost acknowledges himself as his pupil; Jacobi submitted to his sway; and many now forgotten notabilities—Kraus, Scheffner, and others—professed to owe all they were to his influence.

To estimate this influence, we must remember the divisions of the literary world of Germany at the time. The common sense, French, Voltairean rationalism, which had its stronghold at Berlin, had, unfortunately for itself, taken up arms against the rising national romantic literature heralded by *Werther* and *Götz*. The national party was divided into those who, like Goethe, were “decidedly not Christian,”

and those who, like Herder, wished to convict the prevailing irreligion of shallowness. Standing almost outside these two tendencies were Lessing and Hamann, men of very unequal merit, but each "a voice crying in the wilderness" for thoroughness and light. As Lessing to the temporising, confused, rationalistic Evangelicalism of his theological adversaries, so Hamann to the dogmatic enlightenment of the uninspired hierophants of the *Literaturbriefe*. Of course, Lessing was pulling one way, and Hamann the other, and the seed sown by the former fell in most favourable ground; but they were alike in their disgust at whatever was neither cold nor hot, and alike too in suggesting proportionately more than they executed. If his contemporaries had been candid, they might have described Hamann's attraction, that, like Blake, he was "uncommonly good to steal from." Herder was accused of appropriating his *Metakritik* without acknowledgment; one admirer has found Hegelianism discovered in one phrase and rejected in the next in favour of a real Objective Trinity, and his writings came practically to possess more meaning than he intended, because, the sense of his really profound thoughts being made to a certain extent doubtful through their oracular expression, those who were attracted by the ideas suggested developed them each in their own direction, without ceasing to give Hamann credit for originating them. A very opportune tribute to the fascination of his strange compositions was paid, in 1784, by one Buchholz, a hypochondriacal man of fortune, who abruptly invited Hamann to regard him as a son, and accept a capital sufficient to provide for himself and the education of his children. But for this unexpected benefaction, Hamann's later years would have been sadly clouded by anxiety and hardship, and he would scarcely have accomplished what is almost his most considerable work, *Golgatha und Schebitzini*, under which astounding title he published an answer to Mendelssohn's *Jerusalem*. "The place of the skull, and Sit thou at my right hand," is certainly a riddle of a title, but the *opusculum* contains some very telling and lucid criticisms of the Social Contract and the State of Nature. There is a running ironical parallel between the true Moses and his namesake who attempts to make Jew and Christian blend in colourless Deism, though between them there is the Mount Golgotha, and one only is called to sit at the right hand of God; but for the major part of the moral application one must, as Goethe says, give up the hope to "what is commonly called understand."

Herr Petri's second part includes, besides the *Kreuzzüge* and some less important pamphlets, letters down to 1769. The last year of his life was spent in visiting his benefactor, Buchholz, the Princess Gallitzin, and Jacobi, from the latter of whom he fled lest he should be killed with kindness; the Princess's social circle was also too animated, and, we gather, too civilised to suit his age and infirmities; so, declining to fix himself at Münster, he was about to return home when a fever declared itself, and he died almost suddenly, in 1788, in the arms of Jacobi, at the house of his adopted son, and attended by the princess, who obtained permission to have his remains interred in her garden, a less secure resting-place, as it proved, than the common cemetery. Whether German Christians will be persuaded to renew their failing faith by diligent study of the Northern Magus seems more than doubtful; but it is well that all should know that there is such a man, and that his writings are an almost virgin mine of original mystical interpretations and startlingly acute criticisms—startling because acuteness is not commonly the chief distinction of those who wish to criticize Hamann's enemies. But a system, even a theological system (except Luther's cate-

chism), will be sought in vain, for men in general, he thought, lived on fragments, "crumbs," and he was not capable of supplying anything else. In his own phrase, he was shortsighted, he saw with strong and healthy eyes, but only what was close to him; unlike most men, he feels in the abstract and thinks in the concrete, and therefore all his thoughts express themselves in images or allegories. We have his own warrant, too, for thinking him obscure; after a few years he could no longer remember all that his own writings had meant when composed, and all that they had meant to him it was impossible for strangers ever to understand.

H. LAWRENNY.

LITERARY NOTES.

It is reported that Mr. Whymper, who has returned with valuable collections from a second scientific tour in Greenland, has a work upon that Danish dependency in contemplation.

In the *Fortnightly Review* (November and December) Mr. Booth has devoted one of his clear and dispassionate studies of Socialism to Fourier and Fourierism; as an account of Fourier's doctrines it leaves nothing to be desired, but he is too fantastical a writer to show to advantage in a *précis*, without an independent appreciation of his merit, such as Mr. Booth might easily have given. In *The New Heloisa*, part of a chapter in Mr. Morley's forthcoming work on Rousseau, the comparatively moral influence of the work is brought out, together with the fact, sometimes unduly neglected, that the conservative reactionary Romanticism of Chateaubriand and his school was derived directly from Rousseau: Hugo and De Musset caught the ball at its rebound.

In the November number of *Preussische Jahrbücher*, Herman Grimm discusses the claims of Minna Herzlieb and Bettina Brentano to be considered the original of Ottile in the *Wahlverwandtschaften*. He inclines to give Minna the preference, but considers that Goethe's *Briefwechsel mit einem Kinde* scarcely deserves the neglect and distrust with which it is now fashionable to treat it: he had seen the originals of some of the letters, and though the printed versions are garbled, they have a good deal of "foundation in fact."

A r t.

THE CESNOLA COLLECTION OF CYPRIAN ANTIQUITIES.

THE Cesnola Collection of Cyprian Antiquities, which has been recently exhibited at 61, Great Russell Street, is now being packed for shipment to New York. Until these antiquities have been properly arranged in a museum, and the facts connected with their discovery duly stated in the publication now being prepared by General Cesnola, and until they have been compared with what has been already acquired from Cyprus in other museums, it is perhaps premature to advance any very positive theory as to the sources of Cyprian art and the date of its development. It may, however, be well to note here some of the problems which present themselves to the archaeologist after a survey of the Cesnola Collection.

1. A certain number of the larger statues found at Golgos by General Cesnola, and by Mr. Lang at Dali, seem modelled from Egyptian types; while some of the details of costume and of the necessary symbols are clearly derived from a non-Egyptian source (see the torso engraved in Gerhard's *Denkmäler u. Forschungen*, 1863, pl. clxxi.; and Stark's memoir, *ibid.*). These figures seem to be all portraits of kings. Are these Egyptian kings, dedicated during the time when the island was subject to Amasis, or are any of them memorials of that earlier subjection of Cyprus (the Kefa of hieroglyphic texts) which, as may be inferred from Egyptian monuments, had taken place as early as the reign of Thothmes III., or even earlier?

2. Are these statues, again, portraits of Cyprian kings executed when the island was under Egyptian influence, as Stark suggests in the excellent memoir already referred to?

3. On a series of silver coins struck in Cyprus, of which the date probably ranges between B.C. 500 and 400, we find Cyprian characters, and inscriptions in the same character have been found by General Cesnola at Golgos, by Mr. Lang and others at Dali. This character has been recently read by Mr. George Smith, of the British Museum, who used the bilingual (Cyprian and Phoenician) inscription, found by Mr. Lang at Dali, as his key (see *Trans. of the Soc. for Biblical Archaeology*, No. 1, p. 129). We find in these Cyprian inscriptions certain letters which present a striking resemblance to some of the Lycian characters, but we do not recognise, as in the Lycian alphabet, Greek letters in their mature forms. It is probable that a large proportion of the Cyprian inscriptions are of a date subsequent to the Archaic period. The earliest of them may be the inscription on the stèle with a figure in relief of an archer found by Mr. Lang at Dali, and now in the British Museum, and the bilingual inscription from Cyprus, now in the Louvre, in which KAPYT EMI, in Archaic Greek characters, is the equivalent of the Cyprian (see *Revue archéol.* N. S. vi. p. 247). Some of the Cyprian inscriptions in the Cesnola Collection may be as late as the third century A.D. It is remarkable that as yet hardly a Greek inscription has been found in Cyprus, either on coins or on other monuments, which can be referred to an earlier date than the time of Evagoras; and this negative evidence affords reasonable presumption that the Cyprian population predominated in numbers, if not in political power, over the Greek in most parts of the island. Whence did the race using the Cyprian alphabet come? Are they Phrygians as Engel supposed? Did they intermarry and become politically blended with the Greek and Phoenician settlers? Or were some of the small kingdoms into which Cyprus was divided from a very early time purely Greek, and others Cyprian and Phoenician?

4. In all the sculptures from Cyprus which can be fairly referred to the archaic period, and which are not close imitations of the Egyptian, the type of features is very peculiar. The forehead recedes; the cheek-bones are high; the cheeks, sunken; the nose, chin, and lips, unnaturally pointed; the facial angle, much sharper than in early art. It is singular that we must look to Etruria rather than to the Greek world for types analogous to the Cyprian. The two curious reclining figures in painted terracotta from Cervetri, in the Campana Collection of the Louvre, have the same receding foreheads and angular features as may be seen by comparing the engraving of the figures in the *Monum. of the Roman Inst.* vi. pl. 59 (see Brunn, *Annali*, xxxiii. pp. 398, 399), with the figure and head from the Cesnola Collection (*Revue archéol.* N. S. xxii. pl. 23).

5. From the history of Cyprian sculpture as developed in extant monuments, we may infer that art in this island passed through the same phases as in Etruria. First came an Archaic style, with a certain affinity to the Archaic Greek style, but differing from it very decidedly in the type and in many details of costume and ornament. Then succeeded a Hieratic style, through which archaic types were mechanically reproduced, and after that the disturbing influence of mature Greek art. It is probable that it was part of the Hellenizing policy of Evagoras to invite Greek artists to Cyprus, just as the Carian princes, ruling over a mixobarbaric population, drew Athenian art to Halicarnassus. But it should be noted that neither in Cyprus nor in Etruria does this Greek art, introduced at a late period from without, appear to have flourished except as an exotic. It gave rise to no school of Greek artists in Cyprus.

6. As there were undoubtedly Phoenician settlements in Cyprus, and as Phoenician inscriptions both on coins and other monuments are found there, it is to be presumed that some of the works of art found in the island are Phoenician. How are we to distinguish these works from the rest? What are the characteristics of Phoenician art? Or had they, as some assert, no art of their own, being merely the carriers by sea of the produce of other races? No complete answer to this question can be given till we have compared the antiquities from Cyprus presumed to be Phoenician with those found in other Phoenician or Graeco-Phoenician sites, such as Rhodes, Santorin, Cerigo, Sardinia, Palermo, the Etruscan sea-board,

and the Phoenician settlements on the coast of Spain. In the meantime we may draw attention to the admirable memoir, by M. A. de Longpérier, in the *Journal asiatique* of 1858, in which he was the first to point out the remarkable resemblance between the art of the silver bowls from Kitium in the Louvre and those found in a tomb at Cervetri, and with the bronze bowls found by Mr. Layard at Nineveh, some of which have Phoenician inscriptions. The bronze bowl found by General Cesnola, which is published by Ceccaldi in the September number of the *Revue archéol.* for this year, is much ruder in work than the Kitium bowls, and may be a Cyprian imitation of Phoenician art. There is a well known kind of fictile ware, with geometrical patterns painted in brown on a drab ground, which is found at Mycenae, Tiryns, Ialyssus, and other very ancient Greek or Graeco-Phoenician sites. It seems now clearly established that the Phoenicians traded in this ware, if they did not manufacture it, because on more than one fragment from Mr. Layard's excavations, and on a large vase in the Cesnola Collection, we find Phoenician inscriptions. The tombs at Cyprus have yielded this ware in large quantities, and in very fine preservation: while, on the other hand, scarcely any of the later Greek fictile ware has been found in the island. It is not improbable that this archaic fabric of ware was prolonged in Cyprus to a comparatively late period, from the same causes which led to the prevalence of a Hieratic style of sculpture, and it would be interesting with this view to compare the specimens of this ware from Cyprus, in the first Vase Room of the British Museum, with the similar vases from Ialyssus presented by Professor Ruskin to the same museum.

7. Among the terracottas found in Cyprus are some very curious little figures, some on horseback, some driving four-horse chariots. These are modelled solid, and sometimes painted in grotesque colours. They are of the rudest art and fabric. Similar figures of horsemen were found by me in a sepulchral chamber on the site of the Mausoleum, which I have shown to be of a much earlier period than the Mausoleum itself. From the extreme rudeness of these terracottas, it has been thought that they represent an earlier stage of art than any of the other Cyprian antiquities; but may they not be rather children's toys, or objects dedicated by very poor persons?

8. Among the Cesnola statues may be distinctly recognised two varieties of the type of the bearded Venus, Hermaphrodites, worshipped at Amathus (see Engel, *Kypros*, ii. pp. 221-232). I hope to say more respecting these types on a future occasion.

C. T. NEWTON.

ART NOTES.

A letter signed J. Spencer Northcote appeared in the *Times* of November 26, in which attention was called to a danger of a serious nature now threatening the safety of the Catacombs. Up to the present time the right of making excavations in them has been reserved to the ecclesiastical authorities, and for many years has been exercised by a Commission of Sacred Archaeology, of which the Cavaliere di Rossi was a leading member. If in the course of excavations damage was done to the superficial soil, it was assessed and paid for; where the commission found that their labours were likely to be extensive and prolonged, they would induce the Pope to purchase the fee simple of the soil. In this way he became the possessor of the two vineyards between the Via Appia and the Via Ardeatina, under which the famous Catacomb of St. Callixtus has been rediscovered. Recently, a discovery, scarcely inferior in importance, has been made in a field the other side of the Via Appia, of the Catacomb of Pretextatus, and considerable progress had been made, when proceedings were suddenly interrupted by the proprietor bringing an action against the excavators. Di Rossi was the defendant, and a decision favourable to the archaeologists has been given in two courts of law. But the decision only proclaims that the commission and not the landlord are in possession of the crypt, but does not decide the question as to the legitimacy of this possession. The Italian code has been promulgated in Rome. The ministry are, indeed, preparing a project of a law by which questions of this kind are to be settled, defining accurately all

rights relative to monuments standing on private property. But it is to be hoped that special attention will be bestowed on this matter of the Catacombs, and that their public character will be clearly pronounced, so that all that has been done may be preserved to us, and the accomplishment of all that remains to be done facilitated.

We learn from the *Cologne Gazette* that the National German Museum at Nuremberg has recently made considerable acquisitions of importance to artists, and to those who are interested in the origin of printing. These acquisitions consist of a series of engravings on metal and wood, commencing with the fourteenth century, and carried down to the last years of the fifteenth. At this point, the chain is taken up by the collections already in the possession of the museum, consisting of the works of Wohlgemuth, his pupils, contemporaries, and successors down to the seventeenth century. A second series is wholly devoted to printing, and contains first examples of xylography, and these specimens of the first books printed in movable type by Gutenberg, Pfister, Fust, and Schöffer. Next come the books of the most celebrated printers of the fifteenth century. The collection is especially rich in works illustrated by wood engravings, of which it possesses many that are extremely rare, and some which are supposed to be unique. Engravings in mezzotint, &c. form the third series; and the fourth, which has been long in existence, is dedicated to the history of engraving on copper. The collection of MSS. has also been recently enriched by the purchase of a fragment of a Bible of the commencement of the sixth century, in twenty-four leaves, which forms the first of a series consecrated to the history of writing.

The restoration of the cathedral at Mainz is carried on actively. The works at the east end have already progressed so far that the architect Wessicken is about to set free the space occupied by the ruined and destroyed crypt, portions of which have been discovered from time to time. The excavations afford matter of great interest both to architects and archaeologists. The broken remains of tombs and monuments which are brought to light often show claims to considerable importance as works of art, and it is expected that much light will be thrown on certain architectural questions concerning the construction of the cathedral which are at present doubtful.

The present number of *Im Neuen Reich* contains an appeal to the flagging interest felt by the public of Germany in the proposed National Monument to be erected on one of the hills of the Niederwald. The writer objects to the site chosen, and points out that it takes the excitement of battle to induce Germans to clamber up inaccessible hills, and, again, one of the first necessities of a place which it is proposed to make a point of universal pilgrimage is a *Restoration*; this has not been properly provided for in the plan. We then pass from these practical hints to suggestions of an aesthetic nature, the principal of which is that the road of approach should be lined on both sides with the statues of the most distinguished German emperors, the eye and thoughts being thus led gradually up to the final crowning monument.

The *Gazette des Beaux-Arts* for December 1 commences with an article, by M. Paul Mantz, on the Retrospective Exhibition at Milan. M. Mantz draws special attention to the masterly and concentrated force exhibited by Bernardino Zenale in two portraits contributed to the exhibition by the Marquis Giuseppe Arconati. Zenale, who was a contemporary of Leonardo, is chiefly known by his admirable painting, in the Brera, of Lodovico Sforza (Il Moro) and his wife, Beatrice, kneeling before the Madonna. The Marquis Pietro Isambardi contributed a very remarkable female portrait, by Beltraffio. Luini was well represented, but there were also a great many poor imitations passing under his name. The Prinetti collection contributed a fine and authentic Lorenzo di Credi, a Virgin by Gaudenzio Ferrari, which was a very typical example of the master, and a very important Paris Bordone. Amongst the most striking sixteenth-century portraits, M. Mantz places a Moroni, from the gallery of the Marquis

Arconati. One of the most curious features of the exhibition was, says M. Mantz, the number and beauty of works representing the Dutch and Flemish schools.—M. Georges Duplessis reviews M. Didot's *L'Étude sur Jean Cousin*, a portion of which has already appeared in the pages of the *Gazette*.—M. Louis Decamps continues his articles on the New York Museum.—M. Louis Gonze gives a third notice of the Musée de Lille.—M. Alfred Michiels commences an essay on the origin of painting in Germany by a short article on the school of Bohemia.—M. René Ménard has a short paper on Subterranean Rome.—M. Léon Mancino writes on Bethnal Green Branch Museum.—M. Louis Desprez reviews *La Vie militaire et religieuse au moyen-âge*, &c., by M. Paul Lacroix.

On the 4th, 5th, 6th, and 7th of December, the collection of M. F. L., well known to Parisian amateurs, was brought to the hammer, at the Hôtel Drouot, by M. Charles Pillet. The catalogue comprised sculptures in wood and ivory, bronzes, a very remarkable snuff-box, by Lioux de Savignac, presented to Louis XV. by the town of Bordeaux, precious stones, miniatures by van Blarenberghe, paintings by Boilly, Breugel, Paul Brill, Corneille de Heem, Loutherbourg, Michel, Ostade, van de Velde, Wynants, de Vos, Gevrictault, &c.

Richard Schöne, till now in Halle as professor, has accepted the office of "vortragender Rath im Cultus-Ministerium (für Kunst)." He is a capable man, and his appointment is an excellent one. Zahn (Hofrath), who holds the same position at Dresden, refused the post, which was given to Schöne.

New Publications.

- BERNAYS, Michael. Zur Entstehungsgeschichte des Schlegel'schen Shakespeares. Leipzig : Hirzel.
- BRUUN, Chr. V. Bibliotheca Danica. (Systematic Catalogue of Danish Literature from 1482 to 1830, according to the collections at the Royal Library at Copenhagen.) Copenhagen : Gydendahl.
- CROWE and CAVALCASELLE. Lives of Flemish Painters. Murray.
- ELIOT, George. Middlemarch. Blackwood.
- GERARD, C. Les Artistes de l'Alsace pendant le moyen-âge. Tome I. Colmar : Barth.
- GESTA ROMANORUM. Von H. Oesterley. Fasc. 2. Berlin : Weidmann.
- KRAUS, F. X. Die christliche Kunst in ihren frühesten Anfängen. Leipzig : Seemann.
- SACCHI, F. Notizie pittoriche cremonesi. Cremona : Ronzi e Signori.

Theology.

The Song of Solomon. [Schir haschirim, oder das salomonische Hohelied übersetzt und kritisch erläutert von Dr. H. Graetz.] Wien : Braumüller.

THE character and date of the Song of Solomon has been a vexed question among commentators. There are champions of its unity as well as of its fragmentary character; some scholars call it a dramatic work, others a lyrical composition consisting of different songs; some assert Solomon as its author, whilst others suppose it to have been written in the time of the Jewish restoration, and Dr. Graetz even in the days of the Seleucidae. Under these circumstances it was a somewhat bold assertion of a modern critic to say that the latest enquiries had placed the dramatic form of this book above all doubt. On the contrary, the two last writers on this subject, Dr. Graetz and Dr. Diestel (in Schenkel's *Bibellexicon*), deny it entirely, and I think justly. For if it were really a dramatic composition, with a clear distinction between the actors, there would not be so many entirely different opinions as to its argument, that not even the number of the principal actors has been fixed to the

satisfaction of all. Some introduce, besides Solomon and the so-called Sulamith, a third person, the betrothed of Sulamith, but Delitzsch admits only the first two actors, not to speak of the action itself, which is almost entirely a fiction of the commentators, not at all resulting from the text.

Then as to the acts. Ewald is of opinion there are five; Delitzsch, six; E. Meier, seven; Hitzig, nine! The first and the last of these so-called acts, which are identical in all these arrangements, consist of twenty-six and fifteen lines of the printed text! How, in any dramatic representation, can fifteen lines be sufficient to form an act? If some tragedy of Aeschylus, Sophocles, Shakespeare, Goethe, had been handed down to us without a list of the actors and the distinction of the different speeches, it could, I dare say, be so far rearranged that no reasonable doubt should remain about the main argument and development of the action. But with regard to the Song of Solomon we have *quot capita tot sensus*, a fact from which I conclude that it is no dramatic work at all. The sober criticism of men like De Wette, Bleek, Magnus, therefore, never accepted the idea of the Song of Solomon being a drama, which has not even the merit of being original, for Philander von der Linde (F. B. Menke) already in 1710 declared that it was the first opera—not to mention the statement of Origen, that it was composed in the manner of a drama.

Those who, like the present writer, have been discontented with the arbitrary manner in which the Song of Solomon has been treated will read some parts of the book of Dr. Graetz with satisfaction and even with pleasure. He shows clearly that this so-called drama is devoid of action, and that all attempts to elicit anything like a plot are in vain, and it must be owned that none of our Western or classical designations for the different kinds of poetry can be strictly applied to the Song. But when he tries to show, throughout the whole book, a single maiden relating her adventures to a company of other women (the daughters of Jerusalem), Dr. Graetz seems to be no nearer the truth than his predecessors. He thinks that the poet declares his intention of giving both dialogues and a narrative, by adding ענה רודֵי ואמר לִ, ii. 10; but this only proves that the following words are related as those of another person. Besides, Dr. Graetz cannot deny that (v. 9) the supposed hearers speak themselves, so that the daughters of Jerusalem cannot be the auditory, but spoken of in the recital. This one passage gives the deathblow to the whole theory. The Song is neither a drama nor an epic poem recited to the daughters of Jerusalem, and the often repeated words, "I charge you, O daughters of Jerusalem, not awake love, until it cometh of itself," are certainly no warning against this passion, but have some other sense.

This leads us to the question of the general tendency of the book. Those who defend its unity, whether dramatic or epic (we may omit the allegorizers), generally look for some religious or moral idea, such as monogamy, or faithfulness in love, or the representation of a marriage founded on true love—but, alas! the lovers in the Song of Solomon do not marry each other, and faithfulness is not mentioned in the whole book; it is a mere illusion to find such things in our poem. Dr. Graetz also takes pains to prove that there is a moral idea, and so he points out a number of passages in which he thinks it to be evident.

Thus in vi. 8, 9, he sees a commendation of true and chaste love in opposition to the voluptuous pleasures of the harem—the poet praising his *only* and *pure* love. It may be answered that it is almost a general and necessary law in erotic poetry of the higher kind that a lover has but one mistress, whom he praises as faithful and chaste. To

suppose the contrary is impossible, passionate love being "strong as death," and—

"Love-devouring Death do what he dare,
It is enough I may but call her mine."
(*Romeo and Juliet.*)

It is scarcely permissible to draw such precise conclusions from such a natural expression. The passage in question (vi. 4-10) may be fitly explained thus:—"Thou art of surpassing beauty; and though there are many ladies of high rank, I prefer thee to them all: thou alone art my dove," &c. In chap. v. 1, Dr. Graetz thinks that frugal simplicity is contrasted with the luxurious banquets given by the *jeunesse dorée* of that time. But according to his own interpretation, the words אכלתי עזֵי עם רבש שחתה יי' עם חלבֵי have a metaphorical sense: "to eat his honey" means to hear her sweet song; "to drink his wine" is to enjoy her love (p. 167). How is one opinion (p. 32) to be reconciled with the other? The meaning of the passage is pretty clear: "My love is a paradise full of sweet fruit . . . a garden with a well of living water (iv. 15); I entered that garden and ate its fruit." There is not so much as an allusion to luxury and temperance.

This same idea is expressed, according to Dr. Graetz, in the words נָרְדִּי בַּמְסֻבּוֹ רַחֲמֵל עַד שָׁהַמֵּל; here נָרְדִּי is supposed to be her lover, who shows his gallantry ("his perfume") whilst the king is sitting at a banquet. The meaning is said to be that she and her lover enjoy their happiness in simple modesty, and have the dislike of Horace to *persicos adparatus*. But this too is inadmissible; the only natural meaning of נָרְדִּי, "my nard," is *her* loveliness.

Granting that viii. 11, 12, contains the idea that the maiden does not want a guardian of her virtue, or even that virtue defends itself, as almost all modern commentators explain the passage—though the sense of the 200 shekels remains doubtful—a hint like this is not sufficient to prove a moral tendency throughout the whole poem. Finally, in vii. 1, Dr. Graetz discovers a polemic against the public dancers; and in the words, iii. 7-11 (אִישׁ חַרְבוֹ עַל יְרֵכּוֹ מִפְּרָד בְּלִילָות), he finds the idea that true love makes a man valiant and strong, but profligate love effeminate and timid.

From these instances he concludes that the Song of Solomon is written in opposition to sensual love, public dancers and singers, and life in towns and at the court with its luxurious and effeminate customs. Such a tendency could only exist at a particular period, which has now to be ascertained.

It is impossible to follow Dr. Graetz in a system of exegesis which turns the simplest expressions of an erotic song into covert moral exhortations. On the other hand, his remarks on the date of the language, and consequently of the poem itself, are well worth reading. Modern commentators are averse to dwell on the importance of phrases like בְּלִילָה = שְׁלָמָה, מִתְחָוָה שְׁלָלָמָה, כְּרָמִי שְׁלִי, which indicate a very late period. Wishing to make the poem as ancient as possible, they neglect those passages which are adverse to this opinion, e.g. words not used in the older Hebrew literature, as בְּתַל, "wall" (anc. קִיר), מִרְגָּנָה, "terrace" (anc. מַעַלָּה), סָתוּ, "winter" (חַרְבָּה, שְׂתָאָה) (anc. חַרְבָּה), קְצָחוֹת, "curls" (קְצָבָה), rad. קְצַבּוֹ, "tondere," قُصَّة (anc. קְצַבּוֹ), אַמְּנָה, "artist" (anc. אַמְּנוֹן), قُصَّة (anc. قُصَّة), סְפָרָה, "to keep" (anc. נָצַר), הַצִּין, "to look," though the words enumerated by Graetz may not be all decisive. Besides these comparatively modern words, the Song also contains foreign words: e.g. פְּרָדָם, אַרְגָּמָן, and vii. 6, כְּרָמֵל, which, like כְּרָמֵל, certainly means "cochineal," red hair being a mark

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of beauty in the East. The use of these Persian words favours the view that the poem arose subsequently to 500 B.C. But this is very little compared with the use of a Greek word, οὐεῖν, φοεῖν, which it is ridiculous to derive from פְרָה, "quoniam super eo foecundi sint et multiplicentur." The etymologies proposed by Ewald and Hitzig are rejected by such a learned Hebraist as Delitzsch. The words פְרָה and פְרָה are supposed by Graetz to be also of Greek origin; but I question the justice of this opinion, as well in this as in two other passages of the Song—iv. 1, where he proposes to read פְרָה בְּנֵי יִשְׂרָאֵל, instead of נְדִים, so that יְהֹדָה would be διάβολος, πόδον; and iv. 4, where he explains תְּלִפְיוֹת, a really difficult word, by the Greek τηλωνία. Both these conjectures are ingenious, but of no value as evidence.

It may be sufficient to add that Dr. Graetz also points out some direct allusions to Greek customs, e.g. the crown of the bridegroom (iii. 11), and the pillars of marble (v. 15). He is mistaken in adding to these the use of apples as a symbol of love or fertility; the modern Nestorians also use them at their nuptials (see my *Neusyrisches Lesebuch*, p. 19). In conclusion he gives an elaborate comparison between Greek writers of idylls and the author of the Song of Solomon. Those who maintain the antiquity of the latter will do well to attempt a satisfactory refutation of the evidence brought forward by Dr. Graetz; though I fear it will prove easier to deny than to refute. On the other hand, Dr. Graetz himself is in a similar position, for he omits the passage about Thirza (vi. 4) which furnished the defenders of a high antiquity with their principal argument; only his evidence is more copious than that of his opponents.

The result of his combinations is that the poem was written B.C. 230–218, as a warning and example to the Jewish gentlemen of Jerusalem and Alexandria. I have nothing to say against this date, but much against the tendency, since I fail to see how a poem containing passages like ii. 6 can inculcate a better lesson than certain modern novels. It is more likely that the poem consists of different songs, solo, duo, descriptive, telling of possibly far distant ages, and subjected in the course of time to numerous alterations. These songs were then collected in the decline of Hebrew literature, as we gather from some linguistic indications referred to above. Some of them may also have been composed at a late period; the common objection that erotic poetry ceases to be written in times of political decay being refuted by comparison of other literatures.

After the introduction, Dr. Graetz gives a reprint of the Hebrew text, and a translation with a commentary. It is a pity that he did not insert his corrections in the text, a reprint of the Masoretic text being useless, as it is in everybody's hands. The corrections themselves have different degrees of merit; some of them are very probable, e.g. i. 3, חַמְרוֹן (for פְרָה); i. 7, נְבָנָה (for אֲיָכָה), &c. But I cannot enter here into further details. The chief importance of the book lies in its vigorous opposition to the prevalent dramatic hypothesis, which renders the true understanding of the text quite impossible.

For this and for other reasons it is an acceptable and even necessary addition to our critical literature, though scarcely any one will accept the main conclusion of the author.

ADALBERT MERX.

Observations on the Collation in Greek of Cureton's Syriac Fragments of the Gospels with Schaaf's Edition of the Peshito and the Greek Text of Scholz. By J. R. Crowfoot, B.D. Williams and Norgate.

MR. CROWFOOT has now completed his laborious collation of Cureton's Syriac Fragments of the Gospels with the

Peshito Syriac and the Greek text of Scholz. In a former number of the *Academy* (vol. ii. p. 63) we pointed out that Mr. Crowfoot's Greek text could not be accepted as a reproduction of the Gospels in their original form. We find, however, from the *Observations* now published, that this was not the object which Mr. Crowfoot proposed to himself, but rather to fix the character and prove the critical importance of the Fragments themselves. In this respect we think that his work is very valuable. Undoubtedly the discovery made by Dr. Cureton of the remains of an old translation of the Gospels in a manuscript, itself of the early date of the latter half of the fifth century, is the most remarkable fact connected with New Testament criticism in recent times; and as there is a striking agreement between the text of these fragments and that of the Cambridge Codex Bezae, the most unlike of all texts to that generally received, the discovery was very unpalatable to those scholars who by the laborious collation of the general run of MSS. had arrived, or supposed that they had arrived, at a text substantially settled. Naturally, therefore, a warm controversy arose; for if the Curetonian Fragments are of the high antiquity claimed for them, scholars must either accept them, and with them the objectionable Codex D, as of paramount authority, or must give adequate reasons for disregarding the text which they offer to us.

As Mr. Crowfoot points out, the antiquity of the Curetonian Fragments has been satisfactorily proved, independently of his labours, while his work was going on. The publication of the Homilies of Aphraates by the most eminent of our Syriac scholars, Professor Wright, of Cambridge, has placed in our possession evidence of the most important kind. We know for certain that ten of these Homilies were written in A.D. 337, twelve more in A.D. 344, and the last in A.D. 345; and their value is increased by the fact that they are not a translation, but were originally written in Syriac by the author. In this work, then, more ancient than any manuscript now extant, the quotations are made, partly from the same text as that contained in the Curetonian Fragments, and partly from the Peshito. The manner of the quotation is such as to incline us to receive Mr. Crowfoot's opinion as the correct one, namely, that the Peshito version was then coming into use, and superseding the Curetonian; just as subsequently the Harkleian superseded the Peshito.

We still however retain our opinion that the Curetonian must be used with great discretion. As might be expected in so ancient a work, the translation is loose and inaccurate, and betrays very frequently considerable ignorance of Greek. Deservedly the Peshito took its place, just as Jerome's version drove the old version out of the field, and our Authorised Version that of Coverdale. But the main point is, not the relative value of the translation, but of the texts from which they were made.

A competent scholar who would publish a Greek Testament, with the variants really contained in the numerous Syriac versions, and in works like that of Aphraates, would be doing good service to textual criticism. At present the references to the Syriac are often untrustworthy. Mr. Crowfoot has performed a valuable service in another direction, namely, in establishing the claims of the Curetonian Syriac, as containing a text of the highest antiquity.

R. PAYNE SMITH.

Commentaries on Genesis. [Weiland Dr. Fr. Tuch's *Commentar über die Genesis*. 2. Auflage, besorgt von Professor Dr. A. Arnold, nebst einem Nachwort von K. Merx.] Halle: 1871. [Commentar über die Genesis. Von Franz Delitzsch. 4. gänzlich umgearbeitete Ausgabe.] Leipzig: 1872.

IT is a remarkable testimony to the value of Tuch's *Commentary on Genesis* that there should still be a demand for

it, thirty-three years after its first publication. It is impossible, indeed, to suppress a regret that the author was prevented from rewriting his work in accordance with maturer critical views and more recent Oriental researches. But the task which the author had neglected could not be performed by a strange hand. Dr. Arnold, therefore, wisely confined himself to incorporating the author's manuscript notes, which consist chiefly of illustrations from Oriental literature, and inserting a few indispensable corrections, and some references of his own to the works of contemporary scholars. He has also added Tuch's essay on Genesis xiv. from vol. i. of the *Zeitschrift* of the German Oriental Society. Owing to his untimely death, the latter part of the printing had to be superintended by Dr. Merx, to whom the reader is indebted for one of the most valuable features of the new edition. This is a *Nachwort*, or "after-word," appended to the original introduction, and containing a historical survey of the criticism of the Pentateuch since the date of Tuch's first edition. Without aspiring to the completeness of the literary summary given by Dr. Delitzsch, it is far more striking and suggestive, owing, doubtless, to the superior consistency of Dr. Merx's position. It is also distinguished for moderation. The writer evidently inclines to the hypothesis of Graf, so far as the late origin of the ritual legislation is concerned, but he is not blind to the weakness of that hypothesis on the side of literary analysis. One of the most interesting parts of the essay is the comparison of Ewald's critical terminology with that of other writers, from which Dr. Merx concludes that the literary critics of the Pentateuch are in all essential points practically agreed. Further progress is expected from a more complete analysis of the Levitical legislation.

The second of the above-named commentaries has been much more thoroughly revised. It may now be said to be, on the whole, the best handbook to the bibliography, the history and mythology, the geography and archaeology, required for the study of Genesis. The title-page mentions contributions from Professor Fleischer and Consul Wetzstein. The former (see pp. 52, 57, 532, 551) have, I believe, mostly appeared in the third edition; the latter are new, and were described in the *Academy*, vol. iii. p. 350. The author's own philological notes are also highly suggestive, and great credit is due to the compiler of the excellent indices. An even greater merit, on account of its rarity, is the frank sincerity of the author, who admits that the criticism of the Pentateuch should be conducted on purely literary principles, and that the unitarian hypothesis is no longer tenable. It is unfortunate that such admirable qualities should be marred by a passion for theosophy, which treats the supernatural details of the unhistoric narratives of Genesis as so many revelations of the invisible world.

T. K. CHEVNE.

Intelligence.

Bishop Colenso continues his criticism on the *New Bible Commentary* (Longmans). Not having thought it worth while, however, to give a detailed review of that work, we can only afford a brief and meagre notice of this very skilful but very severe examination. (Cf. our first notice, *Academy*, vol. ii. p. 535.) In part ii. the author dissects (no other word is suitable) the introduction to Exodus by Canon Cook, and the commentary on that book by the Canon himself and the Rev. S. Clark, a process which is applied in part iii. to Mr. Clark's work on the Book of Leviticus. The results are but a shade less unfavourable to the commentators than before. No scholar can deny their substantial accuracy in many points, though, with regard to the matter of fallacious and evasive reasoning, more allowance should perhaps have been made for the difficult position of beneficed clergymen under archiepiscopal supervision. As we anticipated in our former notice, the writers have been shown to have a defective acquaintance with the criticism of the opposite side. A still more serious charge

proved against Canon Cook is that of inaccuracy in stating the facts as to the *usus loquendi*, since upon these depends one of the most important arguments in the Pentateuch controversy. The Bishop admits, however, that Mr. Clark's contributions are more moderate in tone, and, at least in Exodus, less biased by prejudice than those of his fellow-contributor. It is only fair to say that the ability displayed here, and in the sixth part of his work on the Pentateuch, is such as to place Bishop Colenso in the first rank of living critics, though the *Examination* would perhaps have been more effective had the author been rather more sparing of his hypotheses.

The object of the contributors to the *Protestanten-Bibel Neuen Testaments* is to condense the most probable results of a rational (not rationalistic) criticism in a form adapted to the ordinary language. Its title to mention in these pages consists in the fact that the list of contributors contains several of the most respected names among contemporary scholars, e.g. Holtzmann (on the Synoptic Gospels, Ephesians, Colossians, and Philemon), Lipsius (introduction to the Pauline Epistles and commentary on Romans), Hilgenfeld (on 1 and 2 Peter, Hebrews, and Jude), Holsten (on Galatians). The translation is that of Luther; a few corrections are inserted between the text and the notes. It was a happy idea to divide the editorship between a clergyman and a layman; the pithy words of the latter (Dr. v. Holtzendorff) in the preface express truths which are still far from commonplace. See especially his remarks on the only true sense in which the New Testament can be said to contain contradictions (p. viii). The style of the notes, which are, if anything, too few rather than too many, is not exactly elegant, but free from rhetoric and pedantry.

The second volume of Haurath's *Neutestamentliche Zeitgeschichte* carries the narrative from the foundation of the Christian Church to the second sojourn of St. Paul in Corinth. The third volume of this great work is still to come. It may be as well to remind the reader that the object of the author is to trace the connection of Christianity with the course of the world's history on the basis of a critical examination of the records, the results of which are to be taken as proved. Even on the literary side, the work compares not unfavourably with *Les Origines du Christianisme* of M. Renan. The only important defect we have seen noticed is the want of a first-hand knowledge of later Hebrew literature. The author has just brought out a second enlarged edition of his popular work, *Der Apostel Paulus*.

Dr. H. Strack, of Leipzig, has completed his *Prolegomena* to the Old Testament, the first part of which we announced some time ago. It is a full and accurate summary of all that is as yet known respecting the lost as well as the extant MSS. of the Hebrew Bible, and may be heartily recommended as a supplement and corrective to the current introductions to the Old Testament. (Cf. the review in Geiger's *Zeitschrift*, 1872, p. 140.)

A monograph by Dr. Clem. Brockhaus (*Aurilius Prudentius Clemens in seiner Bedeutung für die Kirche seiner Zeit*) treats of the archaeological illustrations to be derived from the poems of Prudentius, which coincide remarkably with the pictorial representations in the Roman catacombs.

No scholar who busies himself with the history of ancient religions can afford to ignore Mr. C. P. Tiele's *Comparative History of the Egyptian and Mesopotamian Religions*. The author, who writes in Dutch, is acquainted with recent researches, and has a sober, critical judgment. The portion on Phoenician and Canaan may be specially recommended.

The *Bibliotheca Sacra* for October announces a volume of *Emendations of the Authorised Version of the Old Testament*, by Elias Riggs, translator of Winer's Chaldee Grammar, and now missionary at Constantinople.

Contents of the Journals.

The *Revue Archéologique* for November contains a paper by M. V. Guérin on the situation of the tomb of the Maccabees. He agrees with M. Sandreczki (who seems to have been anticipated by Father Forner) in identifying Modin with the village el-Medieh, but differs from that gentleman in placing the sepulchres not at Khirbet-el-Yehoud but at Khirbet-el-Gherbaoui (M. Guérin's spelling). Both ruins are in the neighbourhood of el-Medieh, but only at the latter are there unmistakeable traces of a monument such as that described in 1 Macc. xiii. 27-29.

Studien und Kritiken, 1873, No. 1.—The visible and the invisible Church (Gottschick).—The myths of Jesus in Judaism; by Rösch. [Attempt to account for the historical origin of these traditions.]—On some New Testament sayings of cognate meaning:—Acts xvii. 31; x. 35; Romans xv. 16; i. 18-32; ii. 14-16; by Michelsen. [(a) Connects *τὸν ἀνθρώπον* with *πλεῖστον παρασχόντων τάσσονται*. (b) "Men of all nations shall become members of the spiritual Israel." (c) *Ἄειτοροι πρόδημος*=preacher of the Gospel; *τάσσονται*, a genitive of the subject; *γίνεσθαι*=be performed.]—The evidence for the birth-year of Luther;

by Köstlin. [Uncertain whether 1483 or 1484.]—On Hutten's work, *de Schismate extinguendo*; by Lindner. [The work consists of six letters, five from the universities of Oxford, Prague, and Paris, the sixth from the Kaiser Wenzel, and all relating to the great papal schism. Lindner thinks, however, that they are all by the same, and that an English hand; their object being to establish the doctrines of Wycliffe on the Papacy. He traces them to Oxford.]—Kleinert on Deuteronomy; rev. by Riehm. [An able and suggestive but unsuccessful work.]—Works on practical and apologetic theology.

Monatsschrift für Gesch. u. Wiss. des Judenthums, October.—Gibe and Geba, Gibeat-Saul and Gibeat-Benjamin; by Dr. Grätz. [Distinguishes three places called Geba or Gibeah: (a) the residence of Saul, near Ramah; (b) the town of Geba, west of Michmash; (c) the village of Gibeah, near Jerusalem, where Titus encamped.]—Studies on the LXX. and Peshito to Jeremiah; by P. F. Frankl. [Tends to show that several translators were concerned in the LXX. version.]—The Targum on the Psalms (conclusion); by W. Bacher. [Ascribes it to the same writer as the Targum on Job; fixes the date before 476, because of allusion to the two capitals, Rome and Constantinople.]—November.—The doxologies in the Psalms; by Dr. Grätz. [The doxology is thought to have been, properly, not merely the conclusion of each of the four books of the Psalter, but to have belonged to every psalm when used liturgically. This doxology consists of two parts: 1. The formula, 'בָּרוּ כָּלֵל הָנוּ', preceded by בְּרוּךְ הוּ אֱלֹהֵינוּ, which is an exhortation to the people to take part in praising God; 2. The response of the people, viz. the single or double Amen, and sometimes Hallelujah.]—Studies, by P. F. Frankl (continued).—Halacha-criticism, by Zuckerman.

Theologisch Tijdschrift, November.—The Church of Scotland; by L. W. E. Rauwerhoff. [A summary of the lectures of Drs. Stanley and Rainy, followed by a singularly fair criticism of their respective positions, which we could wish to see translated into English.]—The Epistle to the Galatians in Tischendorf's eighth edition; by J. J. Prins. [The result is that Tischendorf has really improved the text, under the influence of *Cod. Sin.*, in six more or less important passages (i. 10; iii. 1; iv. 14, 15, 25; v. 1), not to mention less significant changes. But in many other passages he has retrograded under the same influence.]—The tribe of Levi; by A. Kuenen. [A review of part of Dr. Land's papers on the state and religion of ancient Israel in *De Gids* for 1871. The question at issue is whether the Levites were originally a tribe or a party.]—Dijserinck's translation of the Apocrypha, part I; rev. by A. Kuenen.

New Publications.

- CLEMENS ROMANUS. *Epidotae. Ad ipsius cod. Alex. fidem ac modum repetitis cursis ed.* C. de Tischendorf. Leipzig: Hinrichs.
- COLENZO, J. W. *The New Bible Commentary . . . critically examined. Part III.* Longmans.
- FRANZ, A. M. Aur. Cassiodorus Senator. *Ein Beitrag zur Geschichte der theolog. Literatur.* Breslau: Aderholz.
- GASS, W. *Symbolik der griechischen Kirche.* Berlin: Reimer.
- REUSS, E. *History of Christian Theology in the Apostolic Age.* Vol. I. English Translation. Hodder and Stoughton.
- SCHWEIZER, A. *Die christliche Glaubenslehre nach protestantischen Grundsätzen dargestellt. 2. Band (Schluss).* Leipzig: Hirzel.
- STRACK, H. L. *Prolegomena critica in Vetus Testamentum Hebraicum.* Leipzig: Hinrichs.
- TIELE, C. P. *Vergelijkende Geschiedenis van de Egyptische en Mesopotamische Godsdiensten.* Amsterdam: Van Kempen.

Philosophy and Physical Science.

DUTCH PSYCHOLOGY.

Van der Wijck's Psychology. [Zielkunde. Door Dr. B. H. C. K. van der Wijck, Hoogleeraar in de Wijsbegeerte te Groningen. Eerste Deel.] Groningen: J. B. Wolters.

DR. VAN DER WIJCK is one of the most distinguished of the many able teachers and writers who are doing so much to make their country take the high position it is now taking in scientific and philosophical investigations. His previous writings, the most important of which is perhaps the small tract, *Oorsprong en Grenzen der Kennis*, have made him well known throughout Holland, where he is regarded as the legitimate successor of his master, Professor Opzoomer.

The present work will do much to extend his reputation; it is the first part of what will be, when it is completed, a very thorough and exhaustive system of Psychology. It contains an elaborate exposition of the author's method; two chapters, partly introductory, on the four degrees of human knowledge, and the connection between the soul and the body; and a very full and interesting discussion of the first part of psychological investigation—man as a sentient being. The second part of the work, which has not yet been published, will contain the results of Professor van der Wijck's researches regarding the intellectual and emotional life of man, and will conclude with a chapter upon the nature and exercise of will. This Dutch Psychology will therefore occupy the ground covered by Professor Bain's two large treatises on the Senses and Intellect, and on the Emotions and Will.

The chief interest which Dr. van der Wijck's work has for us, apart from its scientific value, is the position it occupies with regard to the works of English writers upon the same or kindred subjects. The author evidently means to take up an intermediate position between representative English and German psychologists. He wishes to avail himself of the results of English experiments and observation, without committing himself to the materialistic tendencies which are found in some of the more prominent among our psychologists, and he desires to make full use of German research and speculation, without accepting every German theory and assertion. This middle position between English and German psychology is the most striking characteristic of the book, and must be kept in view when we criticize it. Dr. van der Wijck has fitted himself for the accomplishment of his purpose by a careful study, not merely of English and German philosophy, but of the literature of the two countries. He is as familiar with Goethe, Carlyle, and Thackeray, as with Sir W. Hamilton, Herbert Spencer, Fechner, and Lotze; and this acquaintance gives a literary grace to his style which is often wanting in scientific treatises.

Professor Lotze, of Göttingen, and Professor Bain, of Aberdeen, are selected by Dr. van der Wijck to represent the best German and English schools of psychological investigation, and the *Zielkunde* is an attempt to mediate between these two philosophers. They, in the author's opinion, stand in the fore-front of psychological investigation in England and Germany, and, however worthy of notice other psychologists may be, are the only really representative men.

This selection of representatives shows us Dr. van der Wijck's own position. He accepts all the facts of the extreme sensational, not to say materialist, school, and at the same time is as strenuous an opponent as one could wish of the materialist or even sensationalist theories. He combines the materialist premises of Mr. Bain with the spiritualist conclusions of Professor Lotze.

In his final results, in sympathy, and in his whole conception of the science of psychology, Dr. van der Wijck seems to stand in a much closer relation to the German than to the English psychologist. Professor Bain has many things in common with Professor Lotze: a keen eye for fact, a sympathy with physical investigation, and the desire to bring mental science into as close a relation with physiology and biology as is compatible with its independent existence, but the real standpoint of the one psychologist is very far removed from that of the other. With Professor Bain psychology is merely the natural history of the mind in so far as it is related to the body. His psychology has no relation to metaphysics, except what is contained in the negative statement that there is not and that there can be no mental science and no philosophy except this enumeration and classification of phenomena. His psychology is a demonstration that metaphysic is impossible; and his essays in the

Fortnightly Review show that he more and more inclines to seek for a purely materialist basis for this psychology.

Lotze, on the other hand, has done more than any other living writer to combat the materialistic tendencies of modern thought. His early medical training has made him more tolerant of physical theories than most other psychologists are, and has taught him to observe carefully the physical correlatives of mental phenomena; but he is no materialist. His aim is rather to accept every physical datum that can be given, recognise every physical and materialist explanation of mental phenomena ever brought forward, and from them to draw the conclusion that there must be much in the mind of man that no physical theory can account for. Psychology is with him the debatable land between physics and metaphysics—the first science where the mechanical laws of nature do not exercise unlimited rule, and where the ideal element, limitless and beyond law, must be recognised and accounted for. He is perpetually saying to the sensationalist and materialist, “I accept every fact you can give me, every scientific deduction you can make, and I will, out of your own data and deductions, create a system of spiritual psychology, metaphysics, and philosophy of history, in which the *ideal*, and not the *mechanical*, will be the leading, ruling element.”

These, then, are the two psychologists between whom Dr. van der Wijck tries to mediate. He is not a materialist, nor has he the materialist tendencies of Professor Bain, but he as fully admits the close relations between physiology and psychology. He does not agree with Lotze in sharply distinguishing the mechanical from the ideal, but he denies that psychology is merely a branch of physical science, and that its laws are only applications of the laws of physical science. According to Dr. van der Wijck, psychology is the science of that class of facts which have the common name of Consciousness. It is the science of the phenomena of consciousness, not of what lies behind these phenomena; but the science of the phenomena is a warrant that there may be a science of what lies behind them. Psychology does not state that metaphysic is impossible—it introduces metaphysic.

Psychology and physiology are so nearly allied that it is often difficult to distinguish where the one science begins and the other ends, and to define precisely the relation of the one to the other. Speaking generally, the two sciences deal with the same set of facts, considered relatively as external and internal. Physiology is one of the natural sciences, and the one which corresponds to psychology; it deals with external phenomena only. Psychology is not one of the natural sciences, but it stands in close relation to them; it deals with both external and internal phenomena. Psychologists who claim for their science a distinct and independent existence must therefore be able to show that the internal phenomena of conscious life and the internal perception on which their existence rests are real things, not mere assumptions. If internal perception does not really exist, then Heine and Comte are right when they say that to think of psychology as more than a mere branch of physiology is as antiquated a conception as that which gave a separate existence to alchemy and astrology.

Is there, then, any distinction between external and internal perception, or is the internal only a refined form of the external? This question, on the answer to which depends the existence of psychology as a separate science, is, Dr. van der Wijck seems to think, merely a narrower form of the wider one:—Is there any fundamental distinction between the soul and the body, and, if so, what is the precise relation between them? For although the distinction between psychology and physiology is one that may be held both by

materialists and spiritualists, and although a thinker who denies that there is a spiritual substratum for spiritual phenomena may easily grant that the facts of internal perception are in themselves so distinct from those of external perception, and so thoroughly independent of anything save their own peculiar liability to retention and association, that they well may furnish the basis of a separate science, still the answer given to the question regarding the fundamental relation between the body and the soul almost always does determine the very existence of psychology, or at least the character and importance of the science. For practical purposes, therefore, it is not enough to decide whether there is a sufficient distinction between the phenomena of external and internal perception to afford a basis for the existence of psychology. The psychologist must investigate carefully the relation which exists between the body and the soul, and have some conception of the nature of the substratum which lies behind the phenomena of external and internal consciousness. Dr. van der Wijck discusses the whole of this very interesting subject in his third chapter—on the relation between the soul and the body—perhaps the most important in the volume. The summary of the chapter deserves to be quoted as an example of the author's careful and critical method, equally removed from hasty generalisation and over-confident speculation. The results are summed up under the following heads:—

“ 1. The *incomplete* data which tell us of the union between the soul and the body have furnished four hypotheses regarding that union, two of a dualistic and two of a monistic kind.

“ 2. The first form of dualism, pseudo-materialism, the common form in which the two factors are made to half-resemble each other, is a hypothesis full of inconsequences.

“ 3. The second form of dualism, an honest dualism, according to which brains and mind have something to do with each other merely because they are neighbours, seems to be improbable when tested by facts.

“ 4. The first form of monism, materialism, is the distrusted metaphysic of men who suppose that metaphysic has nothing to do with the matter.

“ 5. The second form of monism, idealism, is the only hypothesis regarding the union of the soul and the body which at the same time agrees exactly with the facts, and which is also a theory consistently and correctly deduced from them.

“ 6. Every one knows and knows only his own soul. We make inferences about the souls of other men from physical events, which, at least so far as we ourselves are concerned, always accompany psychical changes.

“ 7. It is very uncertain how the life of the soul makes itself manifest in the realm of things; but this is certain, that in whatever way it does make itself manifest, it invariably is observed to be the reverse or the other, never the product, of the external phenomena.”

In his answers to the wider, as well as to the narrower, problem of the relation of external to internal conscious life, Dr. van der Wijck desides that psychology, while it is indebted in a variety of ways to physiology, is a distinct science, relating to a distinct set of facts, which depend on a distinct class of laws. The great evidence for internal perception is to be found in memory and recollection; they lay hold of and detain the internal perceptions, and so, as it were, give being and place to them, and bring them under the power of logic and within the scope of science. In psychology, sensations are the material element, and the laws according to which sensations combine and separate are the formal element—*i. e.* the facts of external and internal perception and the laws of association furnish the two factors of the science. But while Dr. van der Wijck thus gives a very important place to the principle of association, he does not consider it the one principle in psychology, as our English psychologists are accustomed to do. In the psychological writings of Mr. J. S. Mill and Professor Bain, the principle of association is continually used to beg the questions argued about. They mainly

tain that the product which results from the inseparable association of several psychological elements is often quite distinct from any and all of its various factors, and by the introduction of this idea of chemical combination into mental science get over a serious difficulty which stands in the way of their theory. Thus conscience, according to Mr. Mill, is only the combination of various desires, which, when combined into one complex feeling, possess an entirely new character; but when Mr. Mill wishes to show that conscience is only educated desire, he reverts to its origin and growth, entirely ignoring that upon his own theory it has become a new whole, and is something quite different from the sum of its parts. Dr. van der Wijck does not make this very convenient, if not very accurate, use of association, and in this relation prefers to follow Professor Lotze, who introduces the idea of *development*. Thus, with Lotze, intelligence is not made from sensation by a process of association simple or complex: it *developes* out of sensation, and so becomes a new and distinct fact, which cannot be resolved back again into its primary elements, nor treated as if it were merely the sum of them. This idea of *growth* is discussed by Dr. van der Wijck with great freshness and critical power in his chapter on the four degrees of mental development, and is used to explain the phenomena of the several senses. The manner in which this idea is introduced and applied gives its chief scientific value to the book.

We have not space to refer to Dr. van der Wijck's description of the various senses, nor to his theory of the relation of what Lotze would call the mechanical and the ideal elements in each, and must refer the reader for further information to the book itself. It is a great pity that so much valuable work should be inaccessible to so many English readers, for we are in great need of a good handbook of psychology, and Dr. van der Wijck's would be very useful and well fitted to supply the deficiency. We shall expect with interest the second part of the book, which treats of the deeper and more attractive problems in psychology, and hope that both parts will ere long be translated and published in England.

THOMAS M. LINDSAY.

Notes of Scientific Work.

Zoology.

The Zoological Remains in the Kitchen-middens of Denmark.—Some twenty years ago the Royal Academy of Sciences of Copenhagen appointed a committee, composed of Professors Forchhammer, Worsaae, and Steenstrup, to make enquiries into the history and contents of the kitchen-middens, which have hitherto been found more frequently and in a less disturbed state in Denmark than in any other country. The committee successively examined more than forty of these ancient depots of culinary refuse, and Professor Steenstrup has just published an abstract of a report read before the International Congress of Prehistoric Archaeology at Copenhagen (*Bulletin du Congrès international*, Copenhagen, 1872, pp. 135–174). These depots vary much in size; one of the largest—that of Meilgaard, in Jutland—has a length of nearly 500 feet, and depth of as much as 12 feet; others having scarcely one-twentieth of this extent. They belong to the Stone age, and are made up chiefly of shells lying in an irregular manner, without any trace of an arrangement analogous to that of deposits formed by the action of water. These shells consist, one and all, of species still used as food for man, viz. oysters, mussels, periwinkles, and cockles; and all the individuals are adult, young specimens being entirely absent. Mixed with these shells are enormous numbers of bones, especially vertebrae, of the fishes of the cod-, flatfish-, and eel-tribes. The remains of birds are chiefly those of natatorial and grallatorial kinds; those of ducks are the most numerous, while the bones of the wild swan—which, at the present period, visits Denmark in the winter only—are not uncommon. But most interesting of all are the remains of the now extinct great northern diver (*Alca impennis*), the former occurrence of which in Denmark is thus placed beyond doubt, though no traces of it have hitherto been found in other parts of the country; and of the capercailzie (*Tetrao urogallus*), which is also extinct in Denmark. The discovery of the latter bird in the kitchen-middens sheds an un-

expected light on the vegetation of the country at the period during which these deposits were formed. As it is known to live only in fir-forests, the leaves of which form its principal food, it must have been obtained by the inhabitants at that prehistoric time when the pine flourished in Denmark—a tree which has been succeeded by the oak, and, still later, by the beech. Mammalian remains are likewise very common, especially those of the common deer, roe-deer, and wild boar. On the other hand, it is remarkable that no traces of either the eland or the reindeer have been discovered, though bones of these two species have been met with in the peat-bogs of the country. The fallow-deer does not appear to have reached Denmark before the middle ages, and has evidently been imported. The remains of the *Bos primigenius* or the *Bos urus* of Linnaeus and Nilsson are less abundant; and while all proof has hitherto been wanting of the existence of this large ruminant in the Bronze and Iron ages, it is beyond question that it lived in Denmark during the period of the pine. This is supported by the fact that beside those remains from the kitchen-middens, an entire skeleton has been found in a stratum composed of pine-trunks, and it was ascertained that the contents of the stomach of the same individual consisted of the foliage of that tree. Of the bones of carnivorous animals, Professor Steenstrup determined the presence of those of the domestic dog, fox, rock- and pine-marten, otter, and seal (*Halichocrus Grypus*), as well as of the wild cat, lynx, and bear—these three species being now extinct in Denmark. Remains of the wolf are very scarce, although this animal has been exterminated only in the last century. Bones in small number of the porpoise, beaver, hedgehog, and water-rat, make up the list, in which, singularly enough, neither the hare, rabbit, nor squirrel is mentioned. On examining the bones of these animals, it was found that the long marrow-bones of the ruminants and wild boar are invariably split by a blow on the conchoid surface, which must have been done for the purpose of extracting the marrow. Long bones of birds which do not contain marrow had never been treated in this manner. Moreover, all the mammalian bones show unmistakably signs of having been gnawed by some carnivorous animal, that removed all the softer and more spongy portions, or destroyed bones of a similar texture, such as the vertebrae or crania of birds, altogether. As this has been done in a uniform, almost systematic, manner throughout the various layers of all the deposits, M. Steenstrup comes to the conclusion that it is the work of an animal living in a state of domesticity with the people who formed the deposits. Comparative experiments made by the reporter have proved that dogs which have free and daily access to the bones of mammals and birds leave exactly the same bones, or the same parts of bones, which have been found in the kitchen-middens.

Notes on the Birds of Damara Land and the adjacent Countries of South-West Africa. By the late Ch. J. Andersson. Arranged and edited by John Henry Gurney. London.—The editor pays a just tribute to the indefatigable zeal of the late Ch. Andersson by devoting an introductory chapter to a biographical sketch of this unfortunate traveller. The birds enumerated in the body of the work amount to 428 species, of which by far the greater number were obtained by Andersson himself; a few, however, that he did not meet with, but which have been satisfactorily ascertained on other authority to have been seen in the districts referred to in the present volume, are included in order to make the list of the birds known to inhabit these countries as complete as possible. As sufficient descriptions of most of the species have already been published in the works of Layard and others, the editor has contented himself with extracting from the manuscripts of Andersson, who had contemplated publishing a work on the birds of South-West Africa, such portions as contain personal and original observations. The nomenclature and the principal references, as well as numerous additional notes on specific distinction, geographical distribution, &c. are the work of the editor.

Chemistry.

Tridymite.—In a continuation of his “Mineralogische Mittheilungen” in *Poggendorff's Annalen*, No. 10, 279, Professor Vom Rath communicates some further information respecting the occurrence of this interesting mineral. From a letter addressed to the author by Professor Wolf, of Quito, it appears that it has been met with at a village named Tumbaco, lying at the foot of a small extinct volcano, Ilaló, three hours north-east of Quito. In driving a shaft through the volcanic tuff that covers the district, a block of very porous andesite was hit upon, the druses of which, varying in size from 2 m.m. to 1 c.m. in diameter, were filled with little tables of tridymite. The crystals likewise apparently lie in the mass of the rock itself, in which crystals of a triclinic felspar, hornblende, and magnetite could be seen with a pocket-lens; quartz, though it frequently accompanies tridymite, was not observed in this block. Some of the thin hexagonal plates were from 3 to 4 m.m. in diameter.—Dr. Krantz also observed the occurrence of this form of silica in a reddish-brown porous trachyte from Stenzelberg, in the Siebengebirge. The rock contains crystals of a lime-soda felspar, hornblende, augite, and magnetite, while the cavities are lined with the

little tabular crystals of tridymite more thickly and abundantly than in the earlier specimens from other localities. An examination of this rock has impressed the author with the belief that the silica constituting the crystals has not been derived from the rock itself, but that solutions or vapours containing silica have during their passage through its mass deposited that substance in the form of tridymite in the cavities.—After many a fruitless research for tridymite in the rocks of the district round Naples, of Ischia, Cumana, and Monte Olibano, it has been found by Professor Vom Rath in a block erupted by Vesuvius in 1822. The rock is a finely grained mixture of sanidine, garnet, and augite. The druses are for the most part filled with sanidine, and on some of the crystals of this mineral little rounded masses of hexagonal plates of tridymite occur. It is interesting to find that the physical characters of these very crystals were described by Scacchi twenty years ago in his paper on Vesuvian and Monte Somma silicates formed by sublimation.—Tridymite has also been detected in the eruptive rocks of the Palatinate by Streng, who has found it in the porphyrite of Waldböckelheim (*Jahrbuch für Mineralogie*, No. 5, p. 628).

Dulcitanine.—This name has been given by G. Bouchardat (*Bulletin de la Société chimique*, xvii. p. 539) to a new organic base, $C_6H_{15}NO_5$, derived from the sugars. The hydrochlorate is produced by the action of ammonia on the hydrochloric or hydrochromic ether of dulcite, $C_6H_{14}O_6$, at 100° in the following way:—



Dulcitanine expels ammonia from its compounds, acts powerfully on litmus, and absorbs carbonic acid from the air. The hydrochlorate forms double salts with the chlorides of gold and of platinum, and in all its properties bears a great similarity to glyceramine, $C_3H_8NO_3$. It establishes new resemblances between the triatomic alcohol, glycerine, and the hexatomic alcohol, dulcite.

The Manganese in Vegetable Tissues.—An elaborate paper by A. Leclerc, on the quantitative determination of the amount of this metal present in soils and trees by a method devised for the purpose, and adopted some time since at the "Station agronomique de l'Est" at Nancy, is published in the *Comptes rendus*, 11th November, p. 1209. After the name of each of the following woods is given the percentage of manganic oxide, Mn_2O_3 , present in its ash: fir, 4·507; oak, 1·488; beech, 5·307; elm, 7·454; lime, 3·744; alder, 1·965; &c. The percentage of the same oxide in the soil of the fir was 0·037; in that of the oak, 0·186; and in that of the beech, 0·110. What portion of the wood of each tree was chosen for the experiment is not stated.

Kongsbergite.—This name has been given by F. Pisani (*Comptes rendus*, 18th November, p. 1274) to a new native amalgam of silver from Kongsberg, in Norway. It occurs in cubes, the sides of which are a centimetre in length, and strongly truncated by octahedral faces. It has the composition: silver, 95·10; mercury, 4·90; which corresponds with the formula $Ag_{18}Hg$. Another specimen of so-called native silver from the same locality had the composition Ag_8Hg , or that of arquerite.

Action of Palladium-Hydrogenium on Organic Compounds.—Saytzeff, in the *Journal für praktische Chemie*, No. 13, p. 128, states the results of his experiments with this agent. Chloride of benzoyl is converted into benzoic aldehyde; this reaction does not take place when platinum-hydrogenium is employed. Nitrobenzol is changed into aniline, nitrophenol into amidophenol, and nitrocarbol, or nitromethane, CH_3NO_2 , into methylamine. Oxalic acid furnishes traces of formic acid.

The Incandescence of Iodine Vapour.—According to G. Salet (*Poggendorff's Annalen*, No. 8, p. 320) the vapour of iodine may be raised to redness like a solid or liquid body, that is to say, at high temperature it emits only slightly refrangible rays, which give a continuous spectrum. If it be heated in a glass tube, it will be observed to emit light at a temperature at which the glass is barely luminous. An interesting form of the experiment is described in which the iodine is rendered incandescent with a battery current in an exhausted tube, when the light emitted becomes very distinct.

Pyrology, or Fire Analysis.—This is the title of a most astonishing paper by Captain W. A. Ross, in the current number of the *Proceedings of the Royal Society*. For his experiments the author uses the flame of a lamp containing cocoa-nut oil and an ordinary mouth blowpipe, or, as he terms them, a "hydrocarbonous pyrocone" produced by a "pyrogene." One or two of the reactions which he observed, by submitting substances to the action of the "reducing" and "per-oxidating pyrocones," will suffice to indicate the nature of his paper. Silica and alumina, which, by the way, he calls "two omnipresent and almost universally combined earths," become quite black and apparently decompose; the alumina "appears to become partially fused," while the silica presents a steel-black mass with shining metallic points in it. Sulphur, when the flame is regulated as he directs, also assumes a metallic appearance, and "has no further tendency to burn," but possesses the (as he rightly names it) "remarkable property" of giving in a bead of phosphoric acid reactions similar to those of copper, viz.

green hot and blue-green cold, &c. He even detects nitrogen with the blowpipe. By repeatedly dipping a bead of phosphoric acid into concentrated nitric acid or ammonia, and heating it as often in the "hydrocarbonous pyrocone," a metallic-looking film is formed, and the bead, "thus impregnated with nitrogen," develops colour which serves to distinguish this element from alkalies, "the volatisable oxides," &c. Still more unaccountable perhaps than any of Captain Ross' results is the fact of their having engaged the serious attention of the learned body in whose journal his paper has appeared.

Phosphotungstic Acid.—By adding phosphoric acid to a hot solution of bitungstate of soda, and allowing the liquid to cool, triclinic crystals of a sodium salt containing the two acids separate. By converting them into the barium salt, decomposing this in hydrochloric acid, and removing the barium with sulphuric acid, the solution on concentration deposits fine regular octahedra, having a strong refractive power and adamantine lustre, of the double acid phosphotungstic acid. Scheibler, who made this compound (*Chemisches Centralblatt*, 45, 709), has obtained another form of the double acid, by using the ordinary tungstate in the place of the bitungstate, which is distinguished from the above in not crystallising in the cubic system. The two kinds of the double acid appear to correspond to the fullest extent with the two varieties of silicotungstic acid prepared by Marignac. The variety of phosphotungstic acid that forms octahedra is remarkable for its behaviour with solutions containing organic bases. From a liquid containing $\frac{1}{20000}$ of strychnine, or $\frac{1}{10000}$ of quinine, those bodies are thrown down as voluminous flocculent precipitates, which soon become more compact, and can readily be collected on paper, and washed out with slightly acid water.

Normal Hexyl Alcohol, a Constituent of the Essence of Heracleum Giganteum.—A very interesting paper by A. P. N. Franchimont and T. Zincke on the chemical examination of a large quantity, more than 500 grammes, of this essential oil, which had been placed at their disposal by Dr. Hugo Müller, is printed in the *Archives néerlandaises*, vii. 31ème liv. This oil consists of a mixture of about three-fourths butyrate of hexyl and one-fourth acetate of octyl. By means of the octylic alcohol the authors prepared a nonylic acid.

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CLEBSCH, A., und DEDEKIND, R. Riemann's gesammelte mathematische Werke. Leipzig: Teubner.

FRESENIUS, H. Ueber das Corallin. Wiesbaden: Kreidel.

GOEBEL, K. Ueber Kepler's astronomische Anschauungen und Forschungen. Halle: Buchhandlung des Waisenhauses.

GONNARD, F. Notes sur divers Minéraux du Département du Puy-de-Dôme. Lyon: Pitrat.

HÜLL, E. A Treatise on the Building and Ornamental Stones of Great Britain and Foreign Countries. Macmillan.

JAHNEL, J. Ueber den Begriff Gewissen in der Griech. Philosophie. Berlin: Calvary.

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- VOGEL, F. W. Jahrbuch der Bienenzucht für 1873. Mannheim : Schneider.
- VAILLANT, L. Remarques sur les Zones littorales. Paris : Cusset.
- VIERORDT, K. Die Anwendung des Spectralapparates zur Photometrie der Absorptionsspectren und zur quantitativen chemischen Analyse. Tübingen : Laupp.
- WEGER, H. Der Graphit. Berlin : Lüderitz.
- WEIL, A. Die Gewinnung vergrößerter Kehlkopfspiegelbilder. Heidelberg : Wassermann.
- WILSON, A. Elements of Zoology. Black.

History.

The Roman Annalists. [Die römische Annalistik von ihren ersten Anfängen bis auf Valerius Antias. Kritische Untersuchungen zur Geschichte der älteren Republik von K. W. Nitzsch.] Berlin : Gebrüder Bornträger, 1873.

GOETHE once said that we only understand things of which we are able to trace the development, and the expression characterizes exactly the intellectual basis of the scientific methods of the present century ; our method, like our whole culture, is preeminently historical. Philology, since it has ceased to be exclusively occupied with the comparatively short period of greatest brilliancy in the life of a nation, has acquired a different character and a different horizon. It has turned its attention to the less cultivated and polished language of earlier times, or reaching even farther back, it seeks for parallels and derivations in allied languages to place in the proper light facts which, according to the old method, must have remained unexplained. Jurisprudence, which formerly dated its existence from Justinian, now concerns itself by preference with the history and development of Roman law from the Twelve Tables onwards. Even the exact physical sciences have not been able to resist the common tendency, and in some of them the historical method is the only possible. Geology, for instance, may be called a plastic presentation of the history of the revolutions of the earth. All the most exciting scientific questions of our time refer to the origin and growth of the universe, and the modifications to which its individual parts have been subject. As was to be expected, the historical method could not long fail to be applied to history itself. The first modest attempts were made upon the mediaeval historians ; here the work and the workmanship is coarser, so that it is easier to resolve the former into its elements. But before long, encouraged by Niebuhr's success, the same methods and the newly won experience were applied to the authors of Greek and Roman antiquity with brilliant results. Every year sees the appearance in Germany of a number of monographs "de fontibus, &c." or "de ratione quae intercedat, &c." England still stands towards the movement in an attitude of suspense, and receives its conclusions with a degree of mistrust, when the reports of ancient historians are resolved into their component parts by severely analytic criticism. Wrongly so, as it seems to me. To find a parallel in modern times, let us put ourselves in the place of a historian wishing to write the history of the recent Franco-German war a century or two hence, but limited to a single work compiled from the reports of the German general staff, from the correspondence of the *Figaro* or the *Gaulois*, and perhaps from the journals of a delegate from the Geneva committee. Common sense will compel him to distinguish between the different parts of what his authority gives uncritically as a whole. He will have to ask himself in every case which of the various sources supplied a given piece of intelligence, and what degree of credibility, what sympathies, and what tendencies he must presuppose in the writer. And in thus distinguishing, will he not have to pay special attention to

trifling external indications, such as whether distance is reckoned by miles or kilometres, whether a quotation is taken from a French or a German author ; the circumstances of which nation are described with special knowledge and sympathy, &c. ?

Our position is exactly similar in respect to Livy's great historical work, which is based upon authorities of just such heterogeneous nature and quite as various grades of credibility. Nitzsch is not the first who has approached it with the critical scalpel. It is ten years since Nissen's *Kritische Untersuchungen über die Quellen der vierten und fünften Decade des Livius* (Berlin, 1863) made an epoch in the study of Livy by pointing out for the first time—though only for two decades—not only the way in which he made use of the sources at his command, but also the authority that he must have followed for each separate section. Nissen had dedicated this work to his former instructor, Nitzsch, who now in his *Römische Annalistik* includes especially the three first decades in the circle of his researches, in order to distinguish the data before us according to their value and credibility, that we may not be reduced to the melancholy alternative of either rejecting everything like Cornwall Lewis, or accepting everything like, for instance, Bröcker. While Mommsen and Rubini have dwelt chiefly in their investigations on the politico-juristic side of Roman history, and in this direction have achieved the most brilliant results, Nitzsch works chiefly by external criticism of the text of our literary authorities. The two methods, so far from excluding each other, if rightly applied, serve for mutual support.

The kernel of the present work, round which the rest crystallizes, is the circumstantial comparison of Liv. ii. i.-iv. 8 with Dion. Halic. v. i.-xi. 65, and had already been published in three articles in the *Rheinische Museum*. In the present work, the course and conclusions of this investigation are briefly recapitulated, and in connection with this follows a history of Roman annals down to Fabius Pictor, and then again down to Valerius Antias. The course of the special investigation is extremely interesting and instructive to follow. From discrepancies in the accounts of *cognomina*, and the beginnings of the years given in different parts of Livy, as well as by Dionysius of Halicarnassus, Nitzsch infers the use of different authorities, and distinguishes an earlier and a later source. Besides some circumstantial descriptions (p. 51), he refers to the earlier authority all the short annalistic notices which for the most part report laconically of scarcity, war, inundation, epidemics, &c. Then Plutarch's *Life of Publicola*, which is admitted to be based on the work of Valerius Antias, is brought into requisition for the sake of comparison with those passages which Livy and Dionysius both derive from the later sources. Nitzsch shows very ingeniously how the writer takes every opportunity of exalting the members, both male and female, of the Valeria gens ; how he must belong to the age of Sulla, because he introduces into the earlier history of Rome ideas which were then being formed for the first time ; this is apparent from the position assigned to the tribunes of the people, which was entirely changed by Sulla, from the conception of the plebs, from the supposition that a law was not valid without the *senatus auctoritas*. When we consider that Valerius Antias was a contemporary of Sulla, and continued his history down to the death of Sulla, we may readily admit the correctness of our author's view that the more recent of the two authorities was none other than Valerius himself.

In the second section of his book (pp. 180–355), the author gives a "history of Roman annual-writing" down to Valerius Antias ; he begins with the *annales maximi*, and naturally

has to discuss Livy's extraordinary statement that all historical monuments had been destroyed when Rome was burnt by the Gauls, while notwithstanding fragments plainly belonging to an earlier date than 390 B.C. can be distinguished amongst the materials which have reached us. Niebuhr and Schwegler explained this curious phenomenon by supposing the existence of short chronicles and family papers. Mommsen assumes that the earlier fasti were both restored and falsified after the conflagration. Nitzsch, on the other hand, assumes a double foundation for the *fasti*: first the records of the high-priests of the temple of Saturn, and, secondly, the fasti of the *aediles plebis* in the temple of Ceres. The author is led to this assumption of aedilian fasti by the peculiar care with which the fortunes of the temple of Ceres are recounted, and by the interest manifested in the Hellenic institutions of Rome, and in the history of Upper Italy. As to the first point, although before the *lex Ogulnia* there was no plebeian pontifex maximus, yet it seems to me that even a patrician would have sufficient reasons for paying attention to the fasti of the temple of Ceres, the centre-point of the religious and sacred interest of a class of such growing importance and influence as the plebs. The second point, on the contrary, seems to be unfavourable to the author's assumptions, for interest in Hellenic culture might be looked for anywhere rather than amongst the plebs, a stationary peasantry, which in those times, as at present, had a conservative aversion to everything of foreign origin. This is clearly seen in Cato, who, sprung from this class, is the best representative of the old plebs in its virtues as well as its failings. Intercourse with Greece, and attachment to Greek civilisation, was a privilege of highly educated aristocratic circles, such as the Scipios. A further argument against the assumption of special aedilian fasti is supplied by the remarkable agreement in our accounts, which do not at all admit of subdivision into two groups. This difficulty in the way of his hypothesis has not of course escaped the author, and he endeavours to remove it by assuming both sources to have been combined and harmonized at a comparatively early period. In the course of his investigation, Nitzsch suggests the further question, when and by whom the fasti were withdrawn from the temple and made public. The first question has been answered by Mommsen to the effect that the last arrangement of the fasti in the shape which has reached us must date from soon after the second Samnite war. Nitzsch accepts this view, and proceeds to connect with it the plausible supposition that the publication of the fasti was carried out by Cn. Flavius, the *protégé* and partisan of Appius Claudius, to whom the plebs was indebted for publishing the *legis actiones*, and the calendar. This also explains how all these notices express so much reverence for the house of Claudius, and so decided an animosity against the Fabii.

Popular poetical legends and ballads formed another important element used by the Roman annalists in their works. Even Niebuhr had called attention to the well-known passages in Cato and Varro in which it is told how noble boys used at that time to recite the praises of their ancestors to the sound of the flute. But while English writers familiarised themselves with this important conception, and even succeeded in imaginary imitations of the old poems, it was almost entirely abandoned in Germany, apparently under the influence of the Hegelian philosophy of history, according to which the Romans, as the people of law, could not, it was supposed, also have possessed a considerable body of popular poetry. It is Nitzsch's merit to have brought this undoubtedly correct idea of Niebuhr's again into esteem, and to have developed it in greater detail by parallels from the historical poetry of Scotland,

Germany, and Servia. This wider view, which also includes the literature of mediaeval historiography, enables the author to draw illustrations from similar appearances in that literature, and so to elucidate the obscure and difficult passages of ancient history-writing: several brilliant examples of this kind are to be found in the present work. The discussion on Fabius Pictor, his literary position, his conception of the constitution and the political history, are also very well worth reading. Nitzsch compares him very aptly with the aristocratic annalists of the sixteenth and seventeenth centuries. As with Valerius Antias the glorification of the Valerii, so with Fabius Pictor the glorification of the Fabian house, and especially of Fabius Maximus Cunctator, is an object of which the writer never loses sight. Valerius has of late been made an universal scapegoat, and though generally, not quite always, with good reason. The careful and deliberate research which Nitzsch has brought once more to bear on the question leads, however, to the result that the greater part of the accusations brought against him is well founded. Valerius Antias is far inferior as an historian to his predecessor Fabius Pictor; in Nitzsch, his sincerity and reliability appear in the most deplorable light: not only because he introduces his own views and political conceptions into the earlier history of Rome, but from the absurd way in which he thrusts his own family into the foreground on every occasion, which is only less intolerable than his disinterested delight in lying, and a habit of colossal exaggeration, especially in reference to numbers. We must unfortunately agree with the author that Valerius Antias marks an epoch in the history of Roman annals, for whereas formerly the annals stood alone, after him a rich memoir-literature arose to dispute the field with them, but they did not end with him, and it is therefore to be regretted that the author, who possesses rare aptitude for the work, should not have continued to trace the annals down to their latest degeneracy.

It would also have contributed to the practical convenience of the book if the author had not disdained to supply a summary table like that given by Nissen (*l. c.* p. 340), in which the authorities for each chapter are briefly indicated.

But such trifles cannot of course affect the value of the book, which we cannot recommend too warmly, especially to those to whom this mode of analysing ancient authorities is still unfamiliar.

V. GARDTHAUSEN.

Intelligence.

The Leipzig publishing firm of S. Hirzel has distinguished itself within the last generation by issuing standard historical works of various descriptions. German literature owes to it the substantial collection of the *Staaten geschichte der neuesten Zeit*, and an important series of publications under the superintendence of the Munich Historical Commission, *Chroniken der deutschen Städte*, both still in progress, as well as some widely popular books, viz. Gustav Freytag's *Bilder aus der deutschen Vergangenheit*, and the same author's excellent biography of Karl Mathy. In this respect Hirzel's catalogue alone would furnish very interesting evidence how considerably both the sound study of history and historical art has been advancing for more than thirty years. Such observations are suggested by three books which Hirzel has published within the last few days.

The highest praise in every respect is due to the second and concluding volume of *The Life of F. C. Dahlmann*, by Anton Springer, which at this time, indeed, is enjoyed by a very large circle of readers all over Germany. It takes up the narrative where the first volume, published about two years and a half ago, left off, viz. after the celebrated crisis in 1837, when the Duke of Cumberland, as King of Hanover, expelled seven professors from the university of Göttingen for adhering to the constitution to which they had sworn. Dahlmann, the two Grimms, and Gervinus were for a considerable time without home, study, or professional chair, since not one of the German governments of the day ventured to provide for them in the teeth of the Bundestag, by which Hanover was supported. Their cruel and unjust

treatment, however, roused public opinion almost for the first time. In order to support those among them who were in want, means were collected by a liberal association of wealthy patriots, chiefly publishers, as well as some authors at Leipzig and Berlin. Dahlmann was thus enabled to spend four quiet years, busy with his history of Denmark (3 vols. in the collection of Heeren and Ukert), which raised his name to the first rank of German historians. In 1842 Frederick William IV. gave him the chair of history and public law in the university of Bonn, which he held until his death in 1860. There would, indeed, be very little worth mentioning from the literary, academical, and personal life of the professor if it were not for the reason that he became one of the fathers of constitutional theory and of the aspiration after national unity which has borne fruit in the present generation. By his famous lectures on Politics (the term being meant in the sense of Aristotle) and on various branches of history, by two small books, almost pamphlets, on the English and French revolutions, but immensely popular in their day as political programmes (both published in 1844 and 1845 by Hirzel's firm), and chiefly by the prominent share he took at Frankfurt, Erfurt, and Berlin, in the endeavours to frame a national constitution for Germany, he displayed a consistent power of mind, word, and character, such as did very few other collaborators in that great but unsuccessful struggle. This character is now delineated by the biographer with masterly art and taste, where possible, in the nervous and pregnant utterances of Dahlmann himself. Extracts from his letters, sayings, and speeches, are intermingled with letters from his correspondents, among whom the most illustrious names are not wanting. In addition to Bunsen's and Stockmar's *Memoirs*, the present volume contains perhaps the most attractive disclosures with regard to the constitutional throes from which twenty years later modern Germany took its origin. Very curious is a project of federal reform submitted to Dahlmann from London by Prince Albert, but still more its criticism by the late King of Prussia, almost inconceivable on account of its vapid, romantic, and entirely unserviceable dreaminess, whereas a letter by the Prince of Prussia, the present Emperor, shows that he as early as then entertained the same notion with Dahlmann, namely, that liberty without power would not be of much use to the Germans.

A book of a very different kind is *Franz von Sickingen*, by H. Ullmann, Professor of History in the University of Dorpat. The hero is probably much less known in England at present than he was in his own time, in the days of Henry VIII. The materials for his personal biography are scanty enough, yet having been an important actor in that great drama of the world's history, the first upheaving of the Reformation period, within the frontiers of his country as well as without, his connections and his deeds had to be searched for in the stores of many a home record-office, and in the recent official publications of foreign countries as well. This has been done by the author with untiring perseverance at Weimar, Cassel, Coblenz, Vienna, Munich, Frankfurt, Strassburg, Dresden, &c., not omitting what is to be found in print in the collections of Le Gray and Lanz, as well as Brewer's wonderful *Letters and Papers of the Reign of Henry VIII.* Dr. Ullmann knows at the same time how to handle his researches and how to write a vivid description of the man and his time which throws all former attempts into the shade. Sickingen, much more than Götz von Berlichingen, is the representative of the free knights of the empire, who, unfortunately for themselves and for the community at large, were never moulded as a political estate into the unwieldy constitution of the Holy Roman Empire, but waged lawless war alternately against the cities and their commerce, against the princes and their territories, or against the emperor himself. This book for the first time discloses the short and romantic, but chequered, career of that powerful knight, who, from his strongholds in the Palatinate (now still existing, but merely in picturesque ruin), with his horsemen, his bands of "Landsknechte," and his artillery, attacked the walls of Worms and of Metz, and, after having been the ally of Francis I. one day, immediately afterwards was on terms again with Maximilian. Nothing, however, is more interesting than his joining the great movement started by Luther himself, the most celebrated man of his own order, the fiery knight Ulrich von Hütten, being his chief guide. For a short time Sickingen seemed, indeed, to head the imperial party of Charles V. soon after his election. Yet the Diet of Worms, 1521, was the turning-point in his life. The confederation of the knights, with Sickingen as their chief, was a power far too strong and too dangerous, not only for the members of the empire and the imperial government, but for the material and spiritual prosperity of the nation. By his attack on Trier in 1523 he drew down upon himself and his order a catastrophe similar to that which a few years later overtook the German peasantry. His death after the capture and amidst the smoking ruins of his Ebernburg, with the allied victorious prince looking upon the dying man (according to the most authenticated reports), abounds in dramatic and tragical effects.

The third work published by the same firm belongs to the class of hitherto unprinted or little known materials for local history of a distinct period. *Basler Chroniken*, "herausgegeben von der historischen Gesellschaft in Basel," vol. i., edited chiefly by two young historians,

Professor W. Vischer, at Basel, and Dr. Alfred Stern, at Göttingen, are unquestionably suggested by the excellent collection of the chronicles of the German cities, undertaken by the Munich Commission. They show what magnificent materials are still to be found in the archives of a small but in some respects leading community like the city and canton of Basel. The volume contains one of the chief sources for the Reformation period of the little state, viz. the chronicle of Fridolin Ryff and his continuator, Peter Ryff, written in German, and from the other side of the movement four accounts, which were written in the Charterhouse of Klein-Basel, the first three in Latin, and the fourth in German. We have seldom met with a more lively description of the highly disturbed social aspect from the very midst of the dissolution of an important monastic foundation than that preserved in the last document (1522-1532), which is not unlikely the work of the last vicar of the house, who remained in the precincts after the prior and part of the monks had left. Every piece is most carefully edited, with an abundance of introductions, notes, addenda, indices, and maps, in the true spirit of methodical investigation, and with a philological and palaeographical exactness such as hitherto has been very rarely applied to Latin or vernacular texts of that period. The series is to be completed in four volumes, and will be another striking monument of that spirited little republic, distinguished again and again both by its wealth and by its taste for learning and literature.

The publication is announced of the eighth and last volume of Greigorius' *Geschichte der Stadt Rom*. The author, whose work procured him not long since the honour of Roman citizenship, concludes it by an eloquent expression of satisfaction that he has been permitted, while writing in Rome of the history of Rome's struggles and sufferings, to witness their only possible and natural conclusion, the "new birth of a people of free citizens."

Contents of the Journals.

Von Sybel's *Historische Zeitschrift*, part iv., contains a description by Lipsius of Irenaeus' position in the development of the Church System; and an account of the Hanseatic League's factory at Bruges (in England privileges were granted to the merchants of Cologne, the "homines Imperatoris," as early as Aethelred's time), which consolidated the privileges previously granted to German merchants.—A notice follows of the question whether Copernicus is more fairly regarded as a Pole or as a German, and a summary of the German and French books on the late war.—Among the shorter reviews are one of Monod's book on Gregory of Tours, whose genuinely barbarous Latin has yet to be restored from the MSS.; and one of Haddan and Stubbs' *Councils of Great Britain and Ireland*, which is highly praised by Pauli.

New Publications.

NEWMAN, J. H. Historical Sketches. (The Turks in their relation to Europe; M. T. Cicero; Apollonius of Tyana; Primitive Christianity.) Pickering.
TESSIER, J. L'Amiral Coligny. Étude historique. Paris: Sandoz et Fischbacher.

Philology.

Tituli Statuariorum Sculptorumque Graecorum, cum Prolegomenis. G. Hirschfeld. Berlin, 1871.

WHAT with the spread of casts, careful engravings and photographs, and what with important discoveries of recent years, like that of the Mausoleum at Halikarnassos, and the monuments of Xanthos, in Lycia, a certain standard of appreciation has now been pretty generally arrived at with respect to the great masters of Greek sculpture, from Pheidias downwards, in merit and in time. As far as they are concerned, little more can be done at present except to correct details in the estimate already formed, and by careful and minute examinations of such of their works as exist to bring the proper services of each artist into such a light that we may be able to realise the manner and rate of the decline. As regards the forerunners of Pheidias, materials are more scanty and opinions more divided; but, meanwhile, it seems to be felt that the best way of coming to a just judgment on their respective merits is by this same method of examining closely the technical and artistic details

of such early works as exist, and comparing the results with the written records that remain.

One of the consequences of this moderate temperament of criticism, which now takes the place of the old familiar platitudes, is an extraordinary assiduity in the collection of every scrap of ancient record touching artists and works of art, whether handed down by writers or left by artists themselves upon their works. In proof of this it will be sufficient to refer to the various publications of learned societies, such as those of Rome and Berlin, to Overbeck's *Antike Schriftquellen* (1868), and to the work now before us, the purpose of which is, first, to give a complete list of the known inscriptions placed by Greek sculptors on their works, and, secondly, to present such considerations as arise from a thorough comparison of the same. On comparing them geographically, we see where the principal centres of the art were, and on comparing them chronologically, we see how these centres moved from time to time, how the art of sculpture in the round, as opposed to relief, which had long been practised, took first footing in the islands of Crete, Samos, Chios, Naxos, and Aegina, how, after flourishing among the Dorians in Crete, it passed over to their kindred in the Peloponnesian towns of Sikyon, Corinth, and Argos, and how, finally, after being taken up by the Ionians, it reached its culmination in the works of Pheidias at Athens and Olympia. The chronological arrangement, however, except in the case of early inscriptions, where the form of the letters alone is almost sufficient to determine the date, is often beset with difficulties, and opens up, among other questions, one of considerable interest, if for no other reason than the quantity of discussion it has already raised. It is now, indeed, generally accepted that, in using the verb *ποιεῖν*, the early sculptors, from Olymp. 40–60, chose the imperfect tense, as Θερίπαχος ἐποίει, that from Olymp. 70–158 the rule was to use the aorist *ἐποίησεν*, and that from Olymp. 158 downwards the imperfect again came into regular use. But in the times of Winckelmann, Lessing, Letronne, and R. Rochette, when almost the only artists' inscriptions known were such as had been found in Italy, and before the distinction had been sharply drawn between archaic and what is called archaic work, there was not enough evidence to show that both tenses had not always been concurrent; that, in fact, the later use of the imperfect was simply an archaism. The difficulty was complicated by an unhappy statement of Pliny (*N. H.* § 26) that Greek artists, as if from a modest sense of incompleteness in their works, generally employed in inscribing them the equivalent for *faciat*, and that he was not aware of more than three instances of the equivalent for *fecit*. These instances not being produced, it was open to assume that his equivalent for *fecit* might as well have been the aorist as the perfect tense of *ποιεῖν*, though the latter seemed to suit the drift of the context better, and to be justified by its absence from inscriptions. The aorist *ἐποίησεν* was certainly the usual equivalent for *fecit*, and those who maintained it to be the true interpretation in this case pointed confidently to the rarity of that tense in the inscriptions then known, and supposed Pliny to have spoken loosely from personal observation of the inscriptions around him. Whatever may have been the meaning he attached to *fecit*, it is now clear that he was entirely wrong in saying that Greek artists in the time of "Apelles and Polycletus" systematically employed the imperfect. Not by way of excuse, but as a means of accounting for his statement, it should be remembered that not only was *ἐποίει* in constant use among the later Greek artists in Italy, but that wealthy Romans who had carried off masterpieces of sculpture from Greece, leaving the bases behind as cumbrous material,

would naturally, in having fresh inscriptions put on, which they were zealous in doing, use the form current in their day.

While claiming, on this and several other interesting questions, to have done little more than to have stated clearly the results of researches made by others, Dr. Hirschfeld comes forward with a new and original theory concerning the custom of Greek artists in adding their father's name to their own, as Λύκιος ὁ Μύρων. It is in itself probable that in ancient times a son followed the profession of his father even more frequently than now, and this is not unlikely to have been especially the case among artists, in whom zeal for their profession has always been a marked characteristic. It is also probable that an outsider who could force his way in such a profession would be conscious of rare talent, and endowed with sufficient vigour to raise him to eminence. As compared with these probabilities, we have the facts that the names of the fathers of Myron, Polykleitos, Alcamenes, and Agorakritos, all celebrated artists, are unknown; that, out of seventy-four instances in which the name of a sculptor's father occurs in inscriptions, it is thirty times the name of an artist known from other sources; that, in the inferior art of gem-engraving, out of about twenty indisputably genuine engravers' names, the only instance which records the name of the artist's father happens to be that of the well-known Dioskourides: while in the art of vase-painting and vase-making we find, out of about seventy artists, only four instances of the father's name being added, and of these, three were distinguished in the same profession. Relying on these facts, Dr. Hirschfeld boldly lays it down as a law that an artist did not append his father's name unless his father had been at the same time his master and instructor. Unfortunately for the utility of this law, it has to be admitted, on the example of Praxiteles, that artists who were sons of artists did not in all cases add their father's name, so that Myron and the other three sculptors mentioned with him above may have been guilty of filial disrespect, rather than entitled to the praise of having made their own way in their profession. Still, this substantial advantage would be gained, that the list of ancient sculptors would be increased by forty-four. Without accepting the theory as completely established, we would not for a moment withhold from Dr. Hirschfeld the praise which he has most undoubtedly earned by the thoroughness, clearness, and modesty of his work, the utility of which will be readily recognised by those who are seriously occupied with the history of Greek art.

ALEXANDER S. MURRAY.

Researches in Furtherance of Assyrian Archaeology. [Ricerche per lo Studio dell' Antichità assira.] By Felice Finzi. Turin: Loescher.

THE premature death of its young and gifted author makes the review of this work a melancholy task. The wide reading and linguistic knowledge of Professor Finzi show how much he might have done for Assyrian studies, had his life been spared. The book falls into three divisions. The first consists of an introduction, mostly historical, originally written as an independent production. The statements contained in it cannot always be trusted; and we are sorry to find the insanity of Nebuchadnezzar alleged to be referred to in his standard inscription, and the accuracy of the Assyrian canon impeached by the assumption of a forty-years' break to make way for a Pul whom the inscriptions declare identical with Tiglath-Pileser. The second part of the book is geographical. It will be found useful; but many of the comparisons made by the author, in utter disregard of pho-

netic similarity, will be questioned by most readers. A chapter on ethnology is added, as well as some interesting remarks on home and foreign products. The Accadian name of the horse, however, is not *satra* (which the writer compares with *šib*!), but *kurra*. This signifies the animal of the Elamite "mountains," or "the east," and may denote the original home of the Babylonian horse, just as the camel was the beast of "the sea" (*a-abba*), or as *gut*, "the ox," seems connected with Guti on the west.* The last section of the volume deals with the mythology, and is the most valuable part of the work.

The book must be read with caution, for, learned and suggestive as it is, there is much in it that is hasty, much that is questionable, much that is positively erroneous. This, however, is inevitable in such tentative studies; but we must regret the small regard that is paid to philological laws in the comparison of words. The ethnological views are no doubt right in the main, though we should altogether demur to the early and important presence of an Aryan element in Babylonia, which is assumed throughout. It may seem ungracious to advert to the misprints which abound in almost every page, especially as the forbearance of the reader is requested for them in the preface. They are too numerous, however, not only in the Assyrian, but in Arabic, Hebrew, Greek, Latin, Turkish, German, English, and Italian words, to be passed over, since they materially detract from the value of the volume. We hope that they will be corrected in a future edition by some competent hand. Death has deprived us of the author himself, and, though we trust that there are others in Italy who will take up the work which he has had to lay down, there are none from whom we could have expected more, or whom science could less have afforded to spare.

A. H. SAYCE.

Contents of the Journals.

Journal Asiatique, No. 73.—Was Jerusalem taken by the army of the Calif of Egypt in 1096 or in 1098? [M. Deffrémy shows that the former date is inconsistent with Kemâl-eddin's narrative of the events which took place in Syria and Palestine between the death of the Sultan Tutuch and the arrival of the Christians before Antioch.]—Royal Chronicle of Cambodia, translated, with remarks, by M. F. Garnier.—Topographical and archaeological results of the excavations undertaken at Jerusalem by the Palestine Exploration Fund, by M. Clermont-Ganneau.—The standard of the Assyrian measures fixed by the cuneiform texts [to be continued], by M. Oppert. [An admirable paper.]—A stele of the temple of Herod (discovered by M. Ganneau), by M. J. Derenbourg. [Shows, *inter alia*, that the "fatal consequences" of the intrusion of a pagan spoken of in the latter part of the inscription refer, not to a judicial sentence, but to a kind of nemesis pursuing the offender.]—Weber on the *Saptakatakam* of Hâla, rev. by G. Garrez.—Letter to the editor, by Mme. Grimblot. [Corrects some misapprehensions, and communicates some English translations of Pali texts by Mr. Gogerly.]—Latest Syriac publications of Dr. Wright, rev. by M. l'abbé Martin. [It seems that there is a MS. of the Acts of St. Philip at Paris, which contains a more ancient text than that which is given by Dr. Wright. The variants, however, are not always very important. The Catalogue of the Syriac MSS. of the British Museum is praised for its exactitude and good classification. A longer notice, supplementary to M. Martin's previous essay on *James of Edessa and the Syriac Vowels*, is given of the fragments of that author's Syriac grammar, printed by Dr. Wright (cf. *Academy*, vol. ii. p. 447), which "are destined to make an epoch in Syriac studies," and "give a much more favourable idea of Jacob's grammatical lucubrations than his letter to George of Sarug, and his treatise on the points have as yet done."]—Note on the chapter of the *Farhang-i-Djchangiri*, relative to dactyly, by S. Guyard. [Adopts Mr. Palmer's explanation of a passage in Firdusi; see *Journal of Philology*, vol. i. No. 4, &c.]

Archæologia Cambrensis, October.—Chevalier Lloyd and G. T. C.'s articles are valuable as containing many Welsh proper names. Professor Evan's Studies in Cymric philology have several brilliant points, but

* It was also called *khar* (*W. A. I.* iii. 68, 2, 64), which may possibly be an Accadian attempt to pronounce *Akkarru*, the Semitic name of Phoenicia, or the "West."

the subjects he touches require a more thorough treatment. Ferguson fails to make it clear how he reads the Bridell Ogham. We miss Stephens in this number—neither he nor the editor should pay any attention to the barking of enthusiasts.

Revue Celtique, Nos. 3 and 4 in one (December 1871 to August 1872).—Corrected readings from Gaulish coins, by A. de Barthélémy.—An article by Picet on DRU in the Celtic names of rivers. [Not exhaustive.]—Bulliot shows the *dea Bibracte* to have been a fountain divinity of Mont Beuvray.—D'Arbois de Jubainville's article on the influence of Gaulish on Merovingian Latin is highly interesting: French *mon*, *ton*, *son*, owe their special form to Gaulish.—A useful list of O. Cornish names by Stokes.—The Luxembourg Folio, re-edited by Rhys, new readings and explanations of the Welsh glosses, curious specimens of pious Latin of the style of Gildas' *Lorica*.—Valuable addenda to Welsh bibliography, by Evans.—Variants of Lagadeuc's Catholicon, by Stokes.—Breton proverbs, by Sauvé.—Breton traditions, &c., by Le Men.—The true and falsified versions of Lobineau's history of Britanny contrasted, by Levot.—Among the miscellaneous contents of the volume, D'Arbois de Jubainville points out some of the grave inaccuracies of the *Gram. Celtaica* (second edition), which owe their origin to Ebel's not having consulted an improved edition of the *Cartulaire de Redon*, and taken into account the readings of Gaulish coins.

Zeitschrift für Deutsche Philologie, iv. 1.—J. Harcycyk: Zu Lampecht's Alexander. [Shows by a comparison with the old French original that the Vorau, and not, as was previously assumed, the Strassburg MS., gives the earlier text.]—Geschichte der deutschen Litteratur, aus W. Wackernagel's Nachlass. [Fragment in continuation of the well-known work; sketches the general characteristics of the seventeenth century.]—J. W. Schulte: Zum Heliand. [The *Praefatio* is a sixteenth-century forgery. Opposes the theory of Behringer that the *Heliand* was based on Tatian's Gospel-harmony.] F. Bauer: Müsiggenger. [A special class of *Bürger*, distinguished from the *Handwerker* by not belonging to any guild.] Schlangen- und Krötenjagen. By the same. [Account of a heathen custom still prevalent in Baden.]—L. Meyer: Zur *Germania* des Tacitus. [Notes on doubtful passages, with criticisms of previous explanations.]

New Publications.

- CATULLI Veronensis Carmina Selecta sec. recog. R. Ellis. Oxonii: Typ. Clarend.
- DE TASSY, Garcin. Rhétorique et Prosodie des Langues de l'Orient musulman. Seconde édition revue, corrigée et augmentée. Paris: Maisonneuve.
- DIETERICI, F. Die Lehre von der Weltseele bei den Arabern im X. Jahrhundert. Leipzig: Hinrichs.
- HARTEL, L. Eutropius u. Paulus Diaconus. Wien: Gerold's Sohn.
- KENNER, F. Ueber eine griechische Inschrift aus Erythrea. Gerold's Sohn.
- LUCILI, C. Saturarum Reliquiae. Emend. et adnot. Luc. Müller. Accedit Acci (præter scenica) et Suei carminum reliquiae. Leipzig: Teubner.
- MAYOR, J. E. B. Thirteen Satires of Juvenal; with a Commentary. Second edition, enlarged. Part II. Macmillan.
- MÜLLER, A. Griechische Philosophen in der arab. Ueberlieferung. Halle: Waisenhaus.
- MURRAY, A. S. Manual of Mythology, founded on Petiscus, Preller, and Welcker. With plates. Asher.
- NETTLESHIP, H. The True Aim of Classical Education. Harrow: Crossley and Clarke.
- NIZARD, C. Étude sur le Langage populaire ou patois de Paris et de sa banlieue. Paris: Lib. Franck.
- PFIZMAIER, A. Gedichte aus der Sammlung der zehntausend Blätter. Wien: Gerold's Sohn.
- RIDDARSGÖUR, Parcevals Saga, Valvers Pátr, Ivents Saga, Mirmans Saga; zum ersten Male herausgegeben und mit einer literarhistorischen Einleitung versehen von Dr. Eugen Kölbing. Strassburg: Karl Trübner. (London: Trübner).
- SIMCOX, G. A. and W. H. Demosthenes and Aeschines on the Crown. Clarendon Press.
- VAHLEN, T. Aristotelische Aufsätze. Wien: Gerold's Sohn.
- WESTPHAL, R. Die Verbalflexion der lateinischen Sprache. Jena: Costenoble.

ERRATA IN No. 61.

Page 457, col. 2, line 30, *dele* "the first part."

" 460 " " 13 from foot, for "Cheroth" read "Chereth."

With reference to paragraph 2, col. 2, page 457, it should be noticed that there are three of the receipts referred to; see, for the third, the preface to Wright's Catalogue, p. x, foll.

